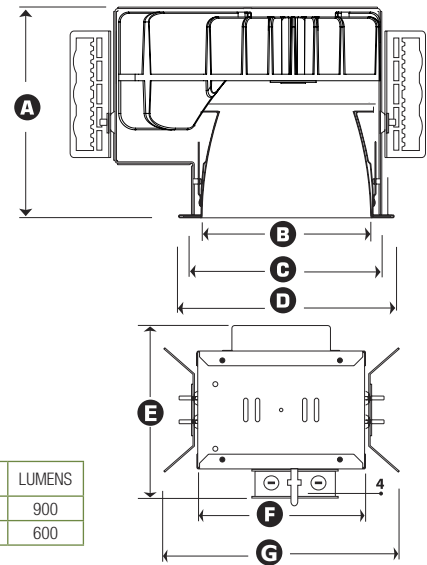


HH4SQ-LED 4" ARCHITECTURAL LED SQUARE DOWNLIGHT



NEW
900 LUMENS

- A** Height = 5-1/2"
- B** Trim Aperture = 4-1/2"
- C** Cut-out = 5-1/8"
- D** Trim Outside Dia. = 5-3/4"
- E** Width = 7-3/4"
- F** Length = 7-1/8"
- G** Max. Length = 10"



INPUT VOLT.	INPUT FREQ.	INPUT CUR.	INPUT POWER	THD	POWER FACTOR	LUMENS
120/277	50/60Hz	133mA/57mA	16W(+/-5%)	<20%	>0.9	900
120/277	50/60Hz	116mA/50mA	14W(+/-5%)	<20%	>0.9	600

DESCRIPTION - 4" Square LED dedicated New Construction housing with integral LED heat management casting and driver (installed on junction box). Available in 600 lumens (14W) & 900 lumens (16W). Lighting is smooth and comfortable while using 75% less energy than the equivalent 65W BR30 and 25% less than the common 18W CFL. Plus, the eco-friendly MAXILUME LED system features 70% lumen maintenance at 50,000 hours life, with Energy Star and California Title-24 (compliances pending).

FEATURES - Greater light output than an 18W CFL or a 65W BR30 while consuming less than 14W & 16W of power. MAXILUME LED luminaires are ideally suited for use in hospitality, health care, commercial, institution, retail and residential applications.



OPTICS - Anyone can mount a chip to a heat sink and make a downlight. Gather the light scattered by the LED chip, shape it into a functional beam with state of the art reflectors, integrate the light through a smooth lens to minimize brightness, then top it all of with a glare reducing reflector that has a 55-degree cut-off. Now you have the Elite engineered superior quality, light engine; producing 600 lumens (14W) & 900 lumens (16W).

DURABILITY - Die-cast aluminum housing and heat management system are engineered for extremely long life and service period. Heat sink is attached to top of housing. The LED light engine is attached to the die-cast heat sink and is easily replaceable and upgradable. Life tests have shown the Elite light engine output will be maintained at 70% of initial at 50,000 hours of operation. Our LED driver is rated for 50 to 60 Hz at 120V input, produces less than 20% THD, has a power factor between 0.90 and 1.00 and is thermally protected for additional safety. Elite's driver is installed on the junction box cover so it may be serviced from below the ceiling.

REPEATABLE - Repeatability means quality. From our chip selection process, to our driver, to the thermal management, the MAXILUME LED Module is engineered for quality. All MAXILUME LED luminaires are rated at 85+ CRI and tested to LM-79 and LM-80 standards by a certified laboratory. California Title-24-2008 and Energy Star compliance are standard.

DIMMABLE - The MAXILUME LED system is fully dimmable down to 10% of initial light output with a 0-10 Volt dimmer when ordered with the following options (DIM10-120, DIM10-277). Fixtures can be shipped with a Lutron Hi-lume A series Driver which can be dimmed with Lutron Dimming Systems when ordered with the following options (LUTH-120, LUTH-277). Triac & Electronic Low Voltage dimming driver also available when ordered with the following options (DIMTR-120). Consult Factory for details.

MOUNTING FRAME - Die-formed construction for maximum heat dissipation and rust protection.

MOUNTING BRACKET - Constructed from 16 gauge steel. Can be installed with 3/4" or 1-1/2" lathing channel, 1/2" EMT, or with optional C-channel mounting bars (Part# BP31) ordered separately. Housing can be adjusted from the inside of the ceiling.

RETAINING SPRINGS - Precision tooled springs secure trim to mounting frame, for effortless and tool-less installation.

JUNCTION BOX - UL Listed for through-branch circuit wiring, provided with four 1/2" knockouts, one 3/4" knockout and four Romex knockouts with true pry-out slots and strain clamps. Designed for straight through conduit runs. Driver is installed on the junction box cover so it may be serviced from below the ceiling.

THERMAL PROTECTION - Standard thermal protection device guards against improper installation and misuse of insulation material.

OUR WORD - The MAXILUME LED lighting system is warranted for 5 years. As a system, we stand behind the entire MAXILUME product from housing to bar hangers.

LISTING

c-UL-us / c-ETL-us - listed for Damp location. Feed Through Wiring. LM79 / LM80

DIMMING INFORMATION

DIMTR (Triac & Electronic Low Voltage Dimming)
DIM10 (0-10V Dimming)
LUTH (Lutron® Hi-lume® Dimming)

Example: HH4SQ-LED-16W-DIM10-120-30K-LED-4601-CL-WH

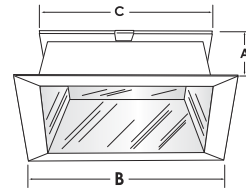
TYPE	600 LUMENS	900 LUMENS	COLOR	EMERGENCY	OPTION	TRIM TYPE	REFLECTOR/ RING FINISH		
HH4SQ-LED	<input type="checkbox"/> 14W-DIMTR-120 <input type="checkbox"/> 14W-LUTH-120 <input type="checkbox"/> 14W-LUTH-277 <input type="checkbox"/> 14W-DIM10-120 <input type="checkbox"/> 14W-DIM10-277	<input type="checkbox"/> 16W-LUTH-120 <input type="checkbox"/> 16W-LUTH-277 <input type="checkbox"/> 16W-DIM10-120 <input type="checkbox"/> 16W-DIM10-277	<input type="checkbox"/> 27K <input type="checkbox"/> 30K <input type="checkbox"/> 35K <input type="checkbox"/> 40K <input type="checkbox"/> 50K	<input type="checkbox"/> EMG-LED (Must have ceiling access for maintenance)	<input type="checkbox"/> BP31 (C-Channel Bar Hanger)	<input type="checkbox"/> LED-4601 <input type="checkbox"/> LED-4607	<input type="checkbox"/> LED-4614 <input type="checkbox"/> LED-4615	<input type="checkbox"/> CL-WH <input type="checkbox"/> CL-SCH <input type="checkbox"/> SHZ-SHZ <input type="checkbox"/> SHZ-WH	<input type="checkbox"/> W-WH <input type="checkbox"/> MB-WH <input type="checkbox"/> WT-WH

LED-4601-CL - REFLECTOR



REFLECTOR/ RING FINISH:

- CL-WH CL-SCH
- SHZ-WH WT-WH
- W-WH SHZ-SHZ
- MB-WH



A = 3-1/8"
B = 5-3/4"
C = 4-5/8"

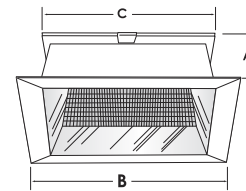


LED-4607-CL - WALL WASH REFLECTOR WITH LENS



REFLECTOR/ RING FINISH:

- CL-WH CL-SCH
- SHZ-WH WT-WH
- W-WH SHZ-SHZ
- MB-WH



A = 3-1/8"
B = 5-3/4"
C = 4-5/8"

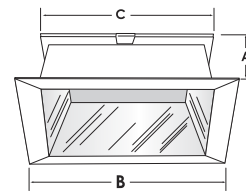


LED-4614-CL - REFLECTOR WITH FROSTED GLASS LENS



REFLECTOR/ RING FINISH:

- CL-WH CL-SCH
- SHZ-WH WT-WH
- W-WH SHZ-SHZ
- MB-WH



A = 3-1/8"
B = 5-3/4"
C = 4-5/8"

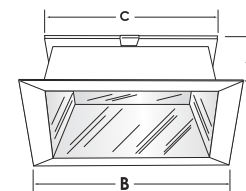


LED-4615-CL - REFLECTOR WITH TEMPERED GLASS LENS



REFLECTOR/ RING FINISH:

- CL-WH CL-SCH
- SHZ-WH WT-WH
- W-WH SHZ-SHZ
- MB-WH



A = 3-1/8"
B = 5-3/4"
C = 4-5/8"



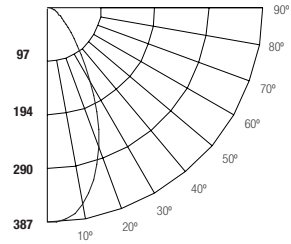
HH4SQ-LED-14W-4601-SHZ-SHZ

INPUT WATTS: 14 LUMENS: 580 CRI: +85 EFFICACY: 41.42 CCT: 4000K

TEST NO.: ELT-261

SPACING CRITERIA: 1.24

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	138.47	23.90	23.90
0-30	294.80	50.80	50.80
0-40	437.23	75.40	75.30
0-60	556.11	95.90	95.80
0-80	580.21	100.00	100.00
0-90	580.49	100.10	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average		
	0°	45°	90°
45	17185	7602	9846
55	8503	5082	9144
65	5787	3405	4869
75	0	1866	2203
85	0	0	367

Lumens Per Zone

Zone	Lumens
0-10	34.80
10-20	103.67
20-30	156.33
30-40	142.43
40-50	80.08
50-60	38.80
60-70	19.59
70-80	4.51
80-90	0.28

Candela Tabulation

0	
0	360
5	361
15	360
25	331
35	250
45	125
55	50
65	25
75	0
85	0
90	0

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80%				70%				50%				30%				10%				0%			
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%		
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100		
1	112	109	106	103	110	107	104	102	103	103	101	99	99	97	96	95	94	93	91	91	91	91		
2	105	99	94	90	103	98	93	89	94	91	87	91	88	85	88	86	84	82	82	82	82	82		
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74	74	74	74	74		
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66	66	66	66	66		
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60	60	60	60	60		
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55	55	55	55	55		
7	76	65	58	53	74	64	57	53	63	57	52	62	56	52	60	55	52	50	50	50	50	50		
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46	46	46	46	46		
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42	42	42	42	42		
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39	39	39	39	39		

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

Cone of Light

Distance to Plane	Initial Footcandle at Nadir	Beam diameter
4.0	22.5	12.9'
8.0	5.6	25.9'
12.0	2.5	38.8'
16.0	1.4	51.7'
20.0	0.9	64.6'

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

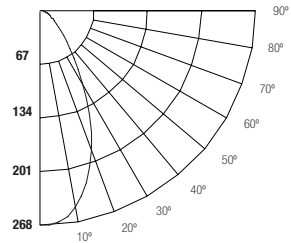
HH4SQ-LED-14W-4607-SHZ-SHZ

INPUT WATTS: 14 LUMENS: 220 CRI: +85 EFFICACY: 20 CCT: 4000K

TEST NO.: ELT-264

SPACING CRITERIA: 0.76

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	83.33	38.00	37.90
0-30	141.79	64.60	64.50
0-40	178.86	81.50	81.40
0-60	211.19	96.30	96.10
0-80	219.73	100.20	99.90
0-90	219.86	100.20	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average		
	0°	45°	90°
45	6756	2751	4028
55	3118	3062	4092
65	1962	2995	3454
75	0	1851	2717
85	0	0	0

Lumens Per Zone

Zone	Lumens
0-10	24.26
10-20	59.07
20-30	58.45
30-40	37.07
40-50	21.57
50-60	10.77
60-70	6.40
70-80	2.13
80-90	0.13

Candela Tabulation

0	
0	262
5	266
15	252
25	182
35	101
45	49
55	18
65	8
75	0
85	0
90	0

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80%				70%				50%				30%				10%				0%			
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%		
ROOM CAVITY RATIO	0	119	119	119	119	117	117	117	117	111	111	111	107	107	107	102	102	102	100	100	100	100		
1	113	110	107	105	111	108	105	103	104	104	102	100	100	98	97	97	95	94	92	92	92	92		
2	107	101	97	93	104	100	96	92	96	93	90	93	91	88	90	88	86	85	85	85	85	85		
3	101	94	88	84	99	92	87	83	90	85	82	87	83	80	85	82	79	78	78	78	78	78		
4	95	87	81	76	93	86	80	76	84	79	75	81	77	74	80	76	73	71	71	71	71	71		
5	90	81	75	70	88	80	74	70	78	73	69	76	72	68	75	71	68	66	66	66	66	66		
6	85	76	69	65	84	75	69	64	73	68	64	72	67	63	70	66	63	61	61	61	61	61		
7	81	71	64	60	79	70	64	60	69	63	59	68	63	59	66	62	59	57	57	57	57	57		
8	77	67	60	56	76	66	60	56	65	59	56	64	59	55	63	58	55	54	54	54	54	54		
9	73	63	57	52	72	62	56	52	61	56	52	60	56	52	60	55	52	50	50	50	50	50		
10	70	59	53	49	69	59	53	49	58	53	49	57	52	49	57	52	49	47	47	47	47	47		

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

Cone of Light

Distance to Plane	Initial Footcandle at Nadir	Beam diameter
4.0	16.39	8.9'
8.0	4.10	17.9'
12.0	1.82	26.8'
16.0	1.02	35.8'
20.0	0.66	44.7'

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

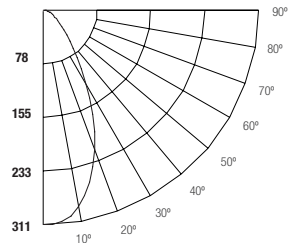
HH4SQ-LED-14W-4614-SHZ-SHZ

INPUT WATTS: 14 LUMENS: 459 CRI: +85 EFFICACY: 32.78 CCT: 4000K

TEST NO.: ELT-265

SPACING CRITERIA: 0.74

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	112.07	24.40	24.40
0-30	231.16	50.40	50.40
0-40	339.89	74.10	74.00
0-60	440.77	96.10	96.00
0-80	458.90	100.00	100.00
0-90	459.07	100.10	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average		
	0°	45°	90°
45	12605	11634	9821
55	6902	5006	7176
65	4266	2648	2726
75	0	1285	1068
85	0	0	167

Lumens Per Zone

Zone	Lumens
0-10	29.06
10-20	83.01
20-30	119.09
30-40	108.73
40-50	66.74
50-60	34.14
60-70	15.15
70-80	2.98
80-90	0.16

Candela Tabulation

0	
0	305
5	302
15	286
25	242
35	171
45	91
55	40
65	18
75	0
85	0
90	0

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80%				70%				50%				30%				10%				0%			
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%		
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100		
1	112	109	106	103	110	107	104	102	103	103	101	99	99	97	96	95	94	93	91	91	91	91		
2	105	99	94	90	103	98	93	89	94	90	87	91	88	85	88	86	84	82	82	82	82	82		
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	73	73	73	73	73		
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66	66	66	66	66		
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62	60	60	60	60	60		
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55	55	55	55	55		
7	76	65	58	53	74	64	57	52	63	57	52	61	56	5										

HH4SQ-LED-16W-4601-SHZ-SHZ

TEST NO.: **ELT-00250**

INPUT WATTS: **16.4**

LUMENS: **911**

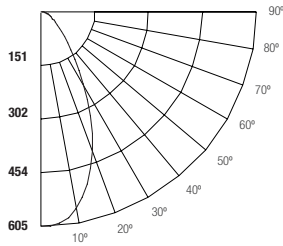
CRI: **+85**

EFFICACY: **57**

CCT: **4000K**

SPACING CRITERIA: **1.26**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	36.7	13.2'
8.0	9.2	26.4'
12.0	4.1	39.6'
16.0	2.3	52.7'
20.0	1.5	65.9'
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	221.90	24.40	24.40
0-30	470.38	51.70	51.60
0-40	686.93	75.50	75.40
0-60	871.79	95.80	95.70
0-80	910.53	100.00	100.00
0-90	910.98	100.10	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average		
	0°	45°	90°
45	28465	15081	15960
55	13795	8493	14875
65	9647	5673	7641
75	0	3282	3447
85	0	0	501

Lumens Per Zone

Zone	Lumens
0-10	56.21
10-20	165.69
20-30	248.48
30-40	216.55
40-50	122.47
50-60	62.39
60-70	31.49
70-80	7.25
80-90	0.45

Candela Tabulation

Zone	0
0-10	0
10-20	5
20-30	15
30-40	25
40-50	35
50-60	45
60-70	55
70-80	65
80-90	75
	85
	90

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80%				70%				50%			30%			10%			0%		
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	
	1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91	
	2	105	99	94	90	103	98	93	89	94	91	87	91	88	85	88	86	84	82	
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	7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	60	56	52	50	
	8	72	60	53	49	70	60	53	48	59	53	48	58	52	48	56	51	48	46	
	9	68	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	43	
	10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39	

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

HH4SQ-LED-16W-4607-SHZ-SHZ

TEST NO.: **ELT-00251**

INPUT WATTS: **16.4**

LUMENS: **372**

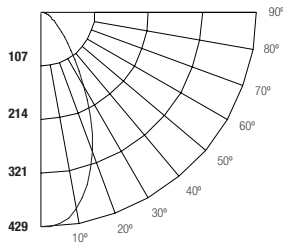
CRI: **+85**

EFFICACY: **23.25**

CCT: **4000K**

SPACING CRITERIA: **1.00**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	36.7	13.2'
8.0	9.2	26.4'
12.0	4.1	39.6'
16.0	2.3	52.7'
20.0	1.5	65.9'
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	137.38	36.90	36.90
0-30	233.90	62.90	62.80
0-40	294.29	79.20	79.00
0-60	357.24	96.10	95.90
0-80	372.25	100.10	99.90
0-90	372.45	100.20	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average		
	0°	45°	90°
45	9875	5260	2720
55	2463	1997	580
65	1992	805	83
75	0	555	75
85	0	0	67

Lumens Per Zone

Zone	Lumens
0-10	39.63
10-20	97.75
20-30	96.52
30-40	60.40
40-50	39.67
50-60	23.28
60-70	11.96
70-80	3.04
80-90	0.21

Candela Tabulation

Zone	0
0-10	428
10-20	426
20-30	405
30-40	313
40-50	180
50-60	72
60-70	14
70-80	8
80-90	0
	85
	90

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80%				70%				50%			30%			10%			0%		
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	107	107	107	102	102	102	100	
	1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	96	95	94	92	
	2	106	101	96	93	104	99	95	92	96	92	90	93	90	88	90	88	86	84	
	3	100	93	88	83	98	92	87	82	89	85	81	86	83	80	84	81	78	77	
	4	95	86	80	75	93	85	79	75	83	78	74	81	76	73	79	75	72	71	
	5	89	80	74	69	88	79	73	69	77	72	68	76	71	67	74	70	67	65	
	6	84	75	68	63	83	74	68	63	72	67	63	71	66	62	69	65	62	60	
	7	80	70	63	59	79	69	63	59	68	62	58	67	62	58	66	61	58	56	
	8	76	66	59	55	75	65	59	55	64	58	54	63	58	54	62	57	54	52	
	9	72	62	56	51	71	61	55	51	60	55	51	59	54	51	59	54	51	49	
	10	69	59	52	48	68	58	52	48	57	52	48	56	51	48	56	51	48	46	

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

HH4SQ-LED-16W-4614-SHZ-SHZ

TEST NO.: **ELT-00252**

INPUT WATTS: **16.4**

LUMENS: **709**

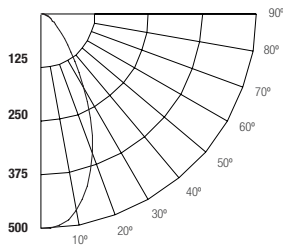
CRI: **+85**

EFFICACY: **44.30**

CCT: **4000K**

SPACING CRITERIA: **1.12**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	30.9	13.3'
8.0	7.7	26.5'
12.0	3.4	39.8'
16.0	1.9	53.0'
20.0	1.2	66.3'
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	180.76	25.50	25.50
0-30	369.00	52.10	52.10
0-40	531.24	75.00	74.90
0-60	681.18	96.20	96.10
0-80	708.55	100.10	100.00
0-90	708.81	100.10	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average		
	0°	45°	90°
45	21309	17938	15485
55	11607	8131	11184
65	7297	4291	4078
75	0	2087	1559
85	0	0	234

Lumens Per Zone

Zone	Lumens
0-10	47.03
10-20	133.73
20-30	188.25
30-40	162.23
40-50	98.59
50-60	51.36
60-70	22.80
70-80	4.57
80-90	0.26

Candela Tabulation

Zone	0
0-10	494
10-20	491
20-30	467
30-40	405
40-50	291
50-60	155
60-70	68
70-80	31
80-90	0
	85
	90

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80%				70%				50%			30%			10%			0%		
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	
	1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	95	94	93	91	
	2	105	100	95	91	103	98	93	90	94	91	88	91	88	86	89	86	84	82	
	3	99	91	85	80	97	89	84	79	87	82	78	84	80	77	82	79	76	74	
	4	92	83	77	72	90	82	76	71	80	74	70	78	73	69	76	72	69	67	
	5	87	77	70	64	85	76	69	64	74	68	64	72	67	63	70	66	62	61	
	6	81	71	64																