

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: LUMIERE

Report Number:

Luminaire Tested: **230-50MR16-12-NSP**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number:
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 230-50MR16-12-NSP
Description:
Light Source: Q50MR16/C/NSP15°-EXT
BARE LAMP DATA FOR 230
Ballast/Driver: -

Summary

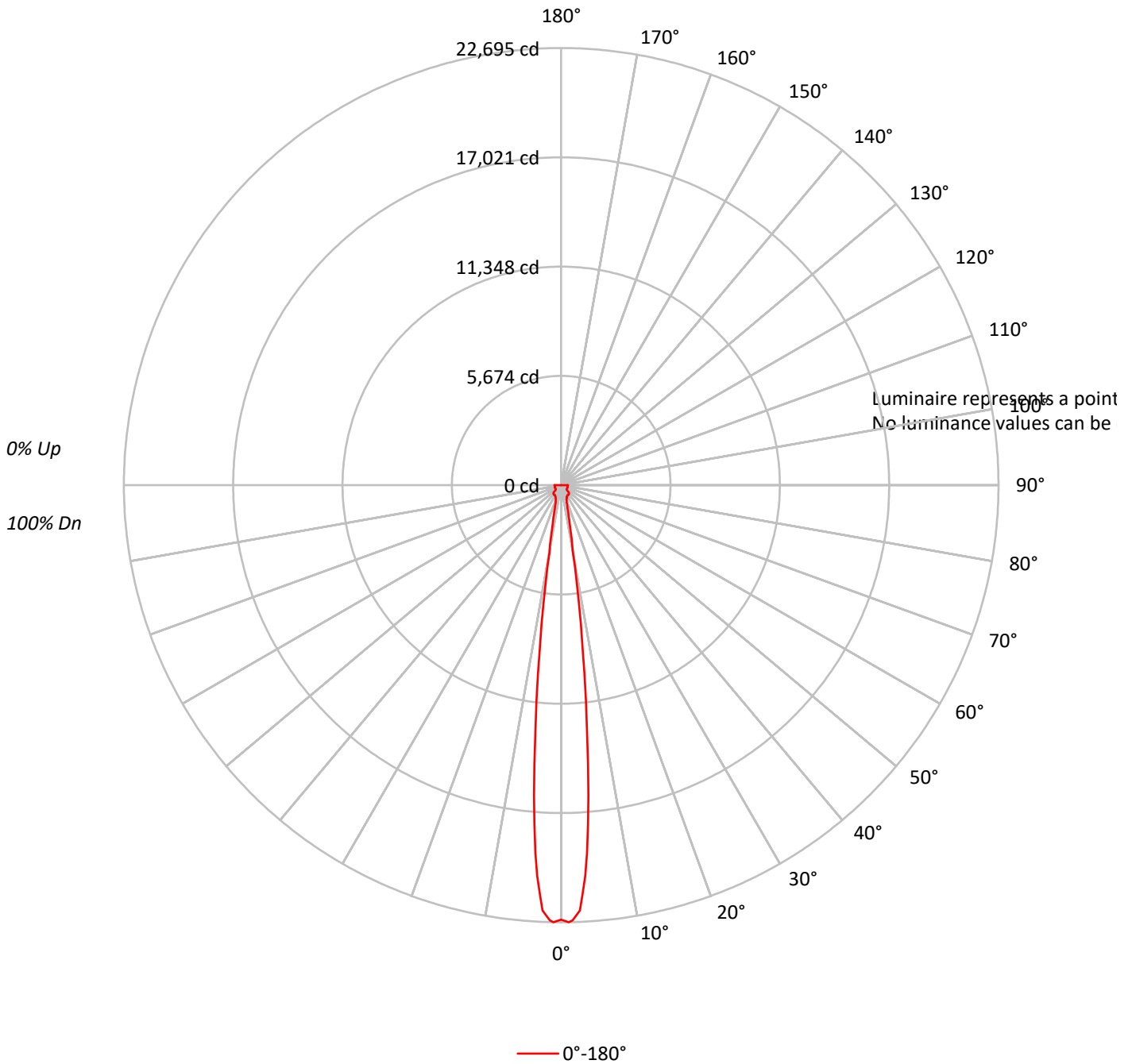
Lumens per Lamp: 1815 (1 lamp)
Luminaire Lumens: 4000.0 lumens
Efficiency: 220.4%
Efficacy: -
Spacing Criteria (0/90/45): 0.23 / 0.23 / 0.22
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

Input Watts (W): 0
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





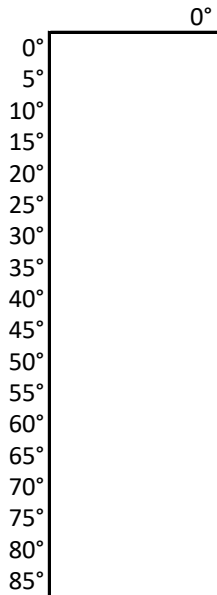
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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	
RCR																						
0	262	262	262	262	256	256	256	256	245	245	245	234	234	234	225	225	225	220				220
1	236	225	214	204	230	219	210	201	210	202	194	201	195	188	193	188	183	178				178
2	218	200	185	173	212	196	182	171	188	177	167	181	171	163	174	166	159	154				154
3	204	182	165	152	198	178	163	150	172	159	148	166	155	145	160	151	143	138				138
4	191	167	150	137	186	165	148	136	159	145	134	154	142	132	150	139	131	126				126
5	181	156	139	126	176	154	137	125	149	135	124	145	133	123	141	130	121	117				117
6	171	146	129	117	168	144	128	117	141	127	116	137	125	115	134	123	114	110				110
7	163	138	122	111	160	137	121	110	134	120	110	131	118	109	128	117	108	104				104
8	156	131	116	105	153	130	115	105	127	114	104	125	113	104	123	112	103	100				100
9	150	126	111	100	147	124	110	100	122	109	100	120	108	99	118	107	99	96				96
10	145	121	106	97	142	119	106	96	118	105	96	116	104	96	114	103	96	92				92

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	1074.9	26.9	59.2
10°-20°	415.4	10.4	22.9
20°-30°	321.0	8.0	17.7
30°-40°	386.7	9.7	21.3
40°-50°	412.4	10.3	22.7
50°-60°	317.7	7.9	17.5
60°-70°	340.2	8.5	18.7
70°-80°	360.2	9.0	19.8
80°-90°	371.5	9.3	20.5
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	1811.3	45.3	99.8
0°-40°	2198.0	54.9	121.1
0°-60°	2928.1	73.2	161.3
0°-90°	4000.0	100.0	220.4
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	4000.0	100.0	220.4

CANDELA DISTRIBUTION:

	0°	Flux
0°	22554	
5°	16186	###
15°	1294	415
25°	692	321
35°	610	387
45°	575	412
55°	347	318
65°	340	340
75°	340	360
85°	338	372
90°	347	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	22553.9
1.25°	22730.7
2.5°	22098.4
3.75°	19880.6
5°	16185.7
6.25°	12035.4
7.5°	8433.4
8.75°	5607.5
10°	3491.4
12.5°	1961.3
15°	1293.5
17.5°	950.8
20°	807.1
22.5°	731.9
25°	692.1
27.5°	652.3
30°	628.0
35°	610.3
40°	614.7
45°	574.9
50°	375.9
55°	347.2
60°	347.2
65°	340.5
70°	342.7
75°	340.5
80°	338.3
85°	338.3
90°	347.2

(END OF REPORT)