

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: METALUX

Report Number: P475254

Luminaire Tested: **22CZ2-20-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475254
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20-SQR-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, SQUARE LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

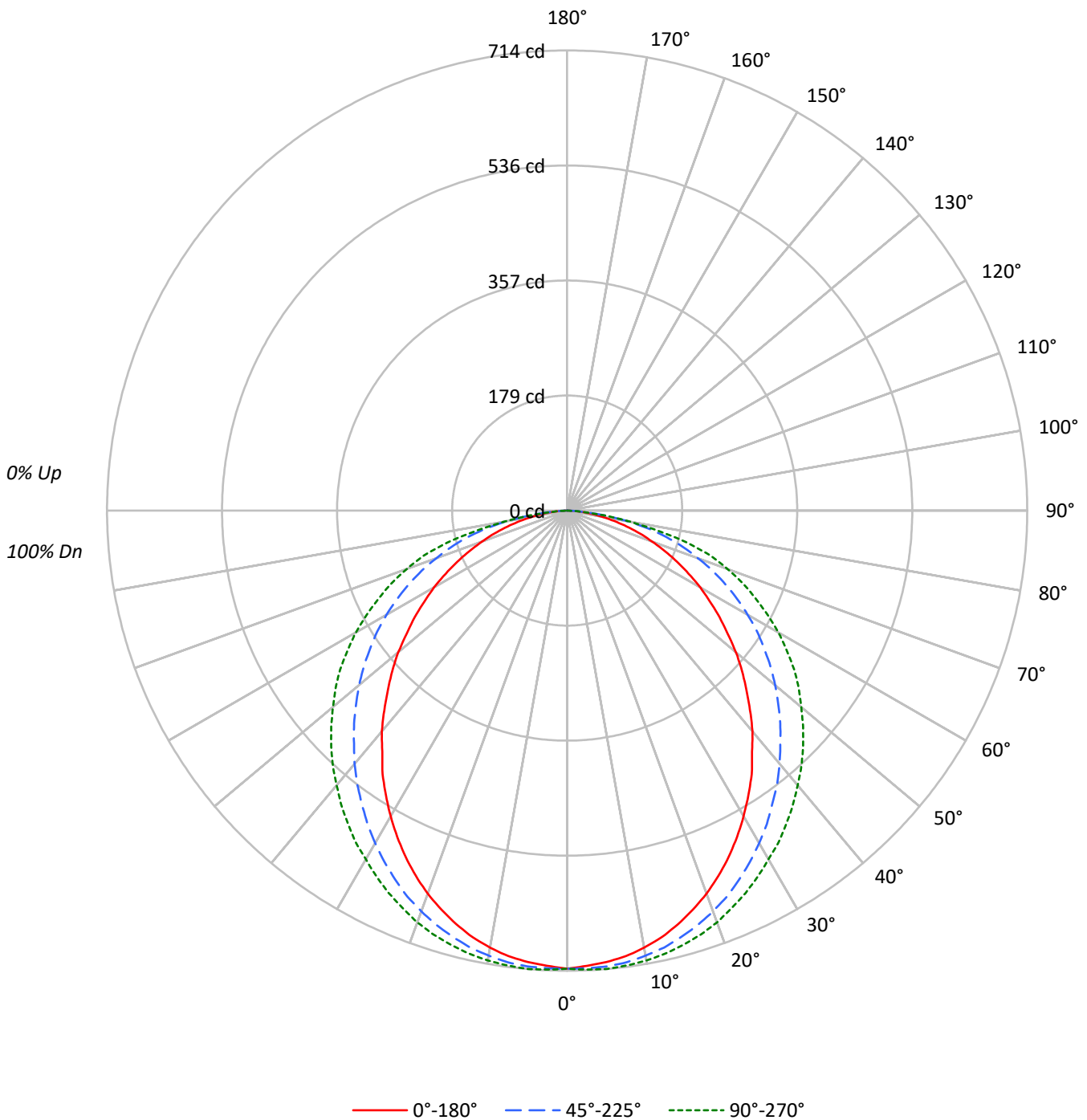
Lumens per Lamp: N/A
Luminaire Lumens: 2035.0 lumens
Efficiency: N/A
Efficacy: 125.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.2
Input Voltage (V): 120
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1913	1913	1913
5°	1899	1918	1928
10°	1882	1916	1937
15°	1851	1908	1943
20°	1812	1895	1947
25°	1761	1875	1944
30°	1702	1852	1942
35°	1640	1824	1948
40°	1571	1802	1955
45°	1496	1779	1970
50°	1431	1763	1985
55°	1355	1749	2017
60°	1284	1742	2038
65°	1199	1728	2053
70°	1102	1702	2082
75°	995	1657	2008
80°	852	1468	1512
85°	685	865	685



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.4	3.3
10°-20°	192.7	9.5
20°-30°	289.4	14.2
30°-40°	345.1	17.0
40°-50°	356.9	17.5
50°-60°	328.1	16.1
60°-70°	261.2	12.8
70°-80°	159.6	7.8
80°-90°	34.7	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	549.5	27.0
0°-40°	894.6	44.0
0°-60°	1579.5	77.6
0°-90°	2035.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2035.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	711	711	711	711	711	
5°	703	705	710	713	714	67
15°	664	672	685	694	697	187
25°	593	608	632	649	655	273
35°	499	521	555	584	593	312
45°	393	421	468	505	518	304
55°	289	321	373	415	430	258
65°	188	220	271	309	322	187
75°	96	124	159	187	193	102
85°	22	27	28	24	22	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	710.8	710.8	710.8	710.8	710.8
2.5°	707.0	707.9	710.8	712.9	712.9
5°	703.1	705.1	709.9	712.9	713.8
7.5°	697.4	700.2	707.0	710.8	711.9
10°	688.7	692.5	701.2	707.0	708.9
12.5°	678.0	683.8	694.5	702.2	704.1
15°	664.5	672.2	684.7	694.5	697.4
17.5°	649.1	658.7	674.2	685.8	689.7
20°	632.6	642.3	661.7	675.1	679.9
22.5°	613.4	625.9	648.1	663.6	667.4
25°	593.0	607.5	631.6	649.1	654.8
27.5°	570.8	588.2	614.3	635.6	640.4
30°	547.6	566.0	595.9	619.1	624.9
32.5°	523.5	544.7	576.6	602.7	610.5
35°	499.3	520.6	555.3	584.4	593.0
37.5°	471.3	496.4	535.1	565.0	575.6
40°	447.2	471.3	512.9	545.7	556.4
42.5°	420.1	446.2	489.7	525.4	538.0
45°	393.1	421.1	467.5	505.2	517.7
47.5°	368.0	396.0	444.3	483.9	496.4
50°	341.9	370.9	421.1	461.7	474.2
52.5°	313.9	345.7	397.9	438.5	453.0
55°	288.8	320.6	372.8	415.3	429.9
57.5°	262.7	295.5	349.7	390.2	403.8
60°	238.5	270.4	323.6	363.2	378.7
62.5°	212.5	245.3	297.4	336.1	350.7
65°	188.3	220.3	271.4	309.1	322.5
67.5°	164.2	196.1	244.3	280.1	295.5
70°	140.0	172.0	216.3	251.2	264.6
72.5°	118.8	146.8	189.3	221.2	233.7
75°	95.7	123.7	159.4	187.4	193.1
77.5°	74.4	99.5	129.4	141.9	144.0
80°	55.0	74.4	94.7	97.6	97.6
82.5°	36.7	51.2	58.9	59.8	58.9
85°	22.2	27.0	28.0	24.2	22.2
87.5°	7.7	7.7	4.8	2.9	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)