

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: P475304

Luminaire Tested: **22CZ2-75VHE-SQR-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475304
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-75VHE-SQR-UNV-L840-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SQUARE LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7346.8 lumens
Efficiency: N/A
Efficacy: 133.1 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

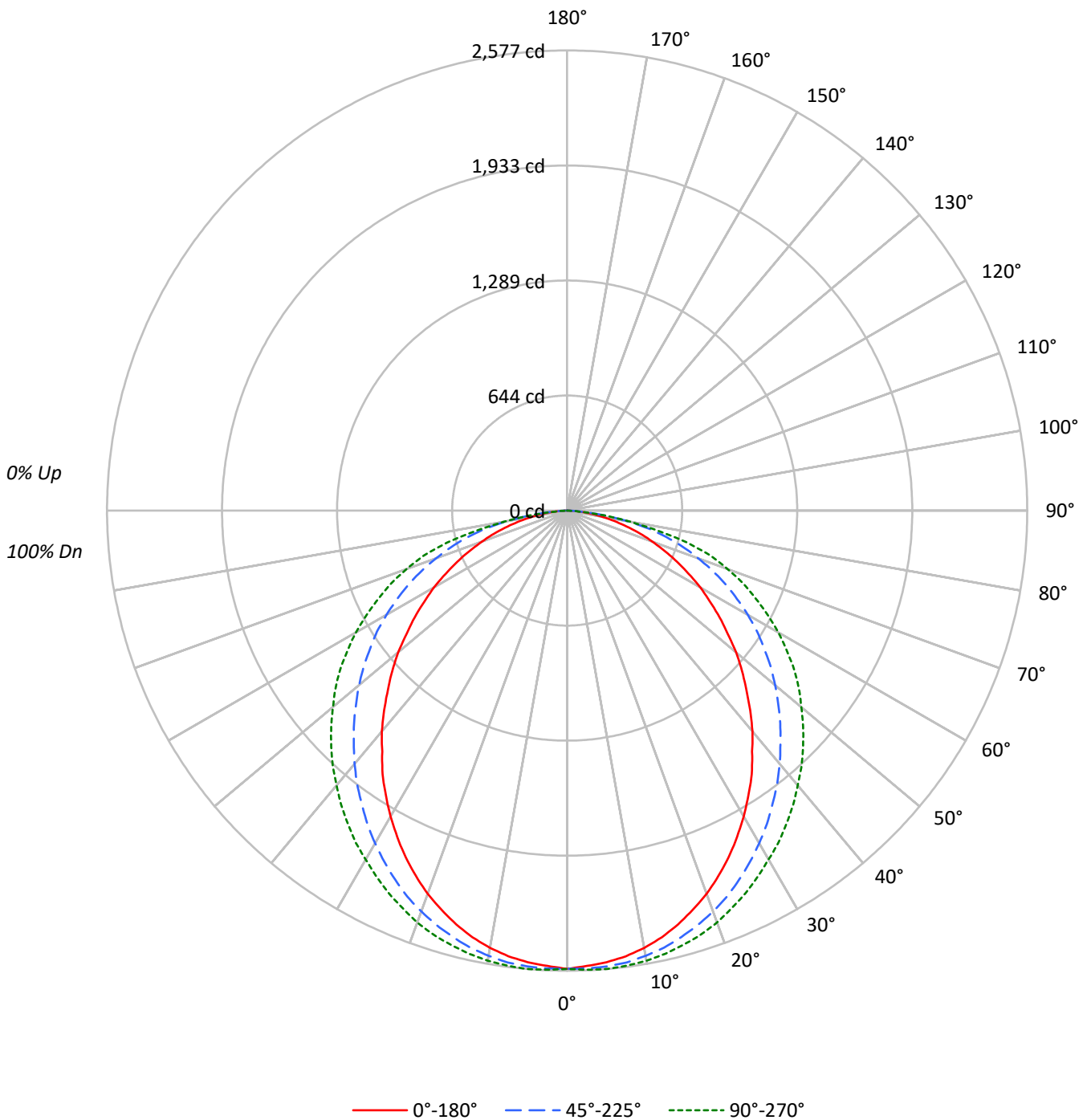
Input Watts (W): 55.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6906	6906	6906
5°	6857	6923	6961
10°	6794	6917	6993
15°	6684	6887	7014
20°	6540	6841	7030
25°	6357	6771	7019
30°	6143	6685	7010
35°	5922	6586	7034
40°	5671	6505	7056
45°	5401	6423	7113
50°	5167	6364	7167
55°	4891	6314	7281
60°	4635	6288	7358
65°	4329	6238	7415
70°	3977	6145	7517
75°	3590	5981	7249
80°	3079	5298	5459
85°	2479	3122	2479



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.3	3.3
10°-20°	695.6	9.5
20°-30°	1044.8	14.2
30°-40°	1246.1	17.0
40°-50°	1288.3	17.5
50°-60°	1184.4	16.1
60°-70°	942.9	12.8
70°-80°	576.1	7.8
80°-90°	125.2	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°	1983.7	27.0
0°-40°	3229.8	44.0
0°-60°	5702.6	77.6
0°-90°	7346.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7346.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2566	2566	2566	2566	2566	
5°	2538	2545	2563	2574	2577	241
15°	2399	2427	2472	2507	2518	676
25°	2141	2193	2280	2343	2364	985
35°	1803	1880	2005	2110	2141	1125
45°	1419	1520	1688	1824	1869	1097
55°	1043	1158	1346	1499	1552	933
65°	680	795	980	1116	1164	674
75°	345	446	575	676	697	368
85°	80	98	101	87	80	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2566.3	2566.3	2566.3	2566.3	2566.3
2.5°	2552.4	2555.9	2566.3	2573.6	2573.6
5°	2538.5	2545.4	2562.8	2573.6	2577.1
7.5°	2517.7	2528.1	2552.4	2566.3	2570.1
10°	2486.4	2500.3	2531.5	2552.4	2559.3
12.5°	2447.8	2468.7	2507.2	2535.0	2542.0
15°	2399.2	2427.0	2472.1	2507.2	2517.7
17.5°	2343.3	2378.0	2433.9	2476.0	2489.9
20°	2283.8	2318.9	2388.8	2437.4	2454.8
22.5°	2214.4	2259.5	2339.8	2395.7	2409.6
25°	2141.1	2193.2	2280.4	2343.3	2364.1
27.5°	2060.8	2123.7	2217.8	2294.6	2312.0
30°	1977.1	2043.4	2151.5	2235.2	2256.0
32.5°	1889.9	1966.7	2081.6	2175.8	2204.0
35°	1802.7	1879.5	2004.9	2109.8	2141.1
37.5°	1701.6	1792.3	1931.9	2040.0	2078.2
40°	1614.4	1701.6	1851.7	1970.1	2008.7
42.5°	1516.8	1610.9	1768.0	1896.8	1942.4
45°	1419.1	1520.2	1687.7	1823.9	1869.0
47.5°	1328.5	1429.6	1604.0	1747.1	1792.3
50°	1234.3	1338.9	1520.2	1666.9	1712.0
52.5°	1133.2	1248.2	1436.5	1583.1	1635.6
55°	1042.6	1157.5	1345.8	1499.4	1551.9
57.5°	948.4	1066.9	1262.5	1408.7	1457.7
60°	861.2	976.2	1168.3	1311.1	1367.1
62.5°	767.1	885.5	1073.8	1213.5	1266.0
65°	679.9	795.2	979.7	1115.9	1164.5
67.5°	592.7	708.0	882.0	1011.3	1066.9
70°	505.5	620.8	781.0	906.7	955.4
72.5°	429.1	530.2	683.3	798.7	843.8
75°	345.3	446.4	575.3	676.4	697.2
77.5°	268.5	359.2	467.3	512.4	519.7
80°	198.7	268.5	341.9	352.3	352.3
82.5°	132.3	184.8	212.6	216.1	212.6
85°	80.3	97.6	101.1	87.2	80.3
87.5°	27.8	27.8	17.4	10.4	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)