

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: P475188

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475188
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-75VHE-HRP-UNV-L840-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ HRP
INSERT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6264.1 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

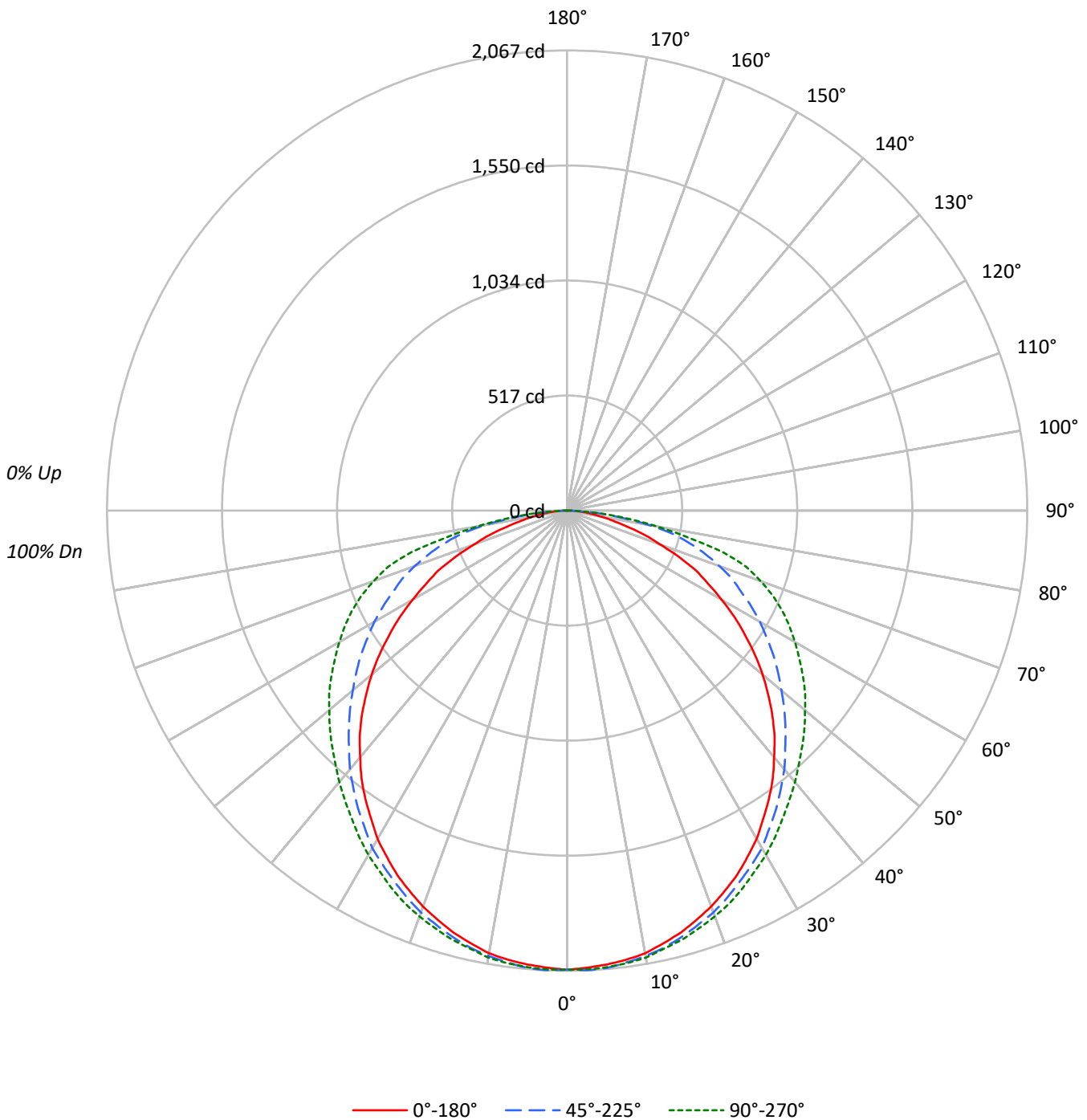
Input Watts (W): 55.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	101	96	93	96	93	90		92	90	87		89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73		80	75	71		77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		50	43	38		49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34		46	39	34		44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27		39	32	27		38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	25		35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5550	5550	5550
5°	5529	5572	5561
10°	5518	5550	5572
15°	5471	5526	5560
20°	5421	5500	5556
25°	5362	5456	5550
30°	5292	5439	5550
35°	5192	5374	5543
40°	5080	5330	5594
45°	4963	5279	5684
50°	4798	5261	5839
55°	4579	5303	6062
60°	4317	5380	6359
65°	4076	5486	6795
70°	3482	5721	7275
75°	2917	5960	7560
80°	2391	5755	6307
85°	2069	4267	4634



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.5	3.1
10°-20°	559.2	8.9
20°-30°	847.5	13.5
30°-40°	1023.3	16.3
40°-50°	1075.3	17.2
50°-60°	1011.7	16.2
60°-70°	843.6	13.5
70°-80°	559.0	8.9
80°-90°	149.0	2.4
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°	1602.2	25.6
0°-40°	2625.6	41.9
0°-60°	4712.6	75.2
0°-90°	6264.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6264.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2063	2063	2063	2063	2063	
5°	2047	2051	2063	2063	2059	195
15°	1964	1972	1984	1992	1996	554
25°	1806	1818	1837	1861	1869	831
35°	1580	1597	1636	1672	1687	988
45°	1304	1324	1387	1458	1494	1004
55°	976	1020	1130	1245	1292	873
65°	640	695	862	1004	1067	623
75°	281	391	573	692	727	305
85°	67	103	138	150	150	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2062.6	2062.6	2062.6	2062.6	2062.6
2.5°	2054.9	2058.7	2066.8	2066.8	2062.6
5°	2046.9	2050.7	2062.6	2062.6	2058.7
7.5°	2035.0	2039.2	2046.9	2054.9	2050.7
10°	2019.3	2023.1	2031.2	2039.2	2039.2
12.5°	1991.7	1995.6	2011.3	2015.5	2015.5
15°	1963.8	1971.8	1983.7	1991.7	1995.6
17.5°	1928.6	1936.2	1951.9	1968.0	1968.0
20°	1892.9	1900.6	1920.5	1936.2	1940.0
22.5°	1849.3	1861.2	1881.1	1900.6	1908.6
25°	1806.0	1817.9	1837.4	1861.2	1869.2
27.5°	1754.3	1766.2	1794.2	1821.7	1825.6
30°	1703.0	1714.9	1750.5	1774.3	1786.1
32.5°	1639.9	1655.6	1691.2	1726.8	1738.6
35°	1580.5	1596.6	1636.0	1671.6	1687.3
37.5°	1517.3	1533.0	1576.7	1620.3	1639.9
40°	1446.1	1466.0	1517.3	1564.8	1592.4
42.5°	1379.1	1399.0	1450.3	1513.5	1541.1
45°	1304.1	1323.6	1387.2	1458.0	1493.6
47.5°	1224.8	1248.6	1323.6	1410.9	1446.1
50°	1146.0	1173.5	1256.6	1355.4	1394.8
52.5°	1062.9	1098.5	1193.4	1300.3	1347.3
55°	976.0	1019.6	1130.3	1244.7	1292.2
57.5°	892.9	932.7	1062.9	1185.4	1236.7
60°	802.1	853.4	999.7	1126.0	1181.6
62.5°	715.2	770.7	932.7	1067.1	1126.0
65°	640.2	695.3	861.5	1003.5	1067.1
67.5°	541.4	616.4	802.1	936.5	999.7
70°	442.6	545.2	727.1	865.3	924.7
72.5°	367.6	466.3	652.0	790.3	845.8
75°	280.6	391.3	573.2	691.5	727.1
77.5°	209.4	323.9	490.1	549.4	553.3
80°	154.3	248.9	371.4	391.3	407.0
82.5°	106.8	173.8	241.2	264.6	272.6
85°	67.0	102.6	138.2	150.1	150.1
87.5°	35.6	39.4	47.5	47.5	47.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)