

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: P475329

Luminaire Tested: **22CZ2-55VHE-SQR-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475329  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-55VHE-SQR-UNV-L850-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SQUARE LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5387.4 lumens  
Efficiency: N/A  
Efficacy: 139.9 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

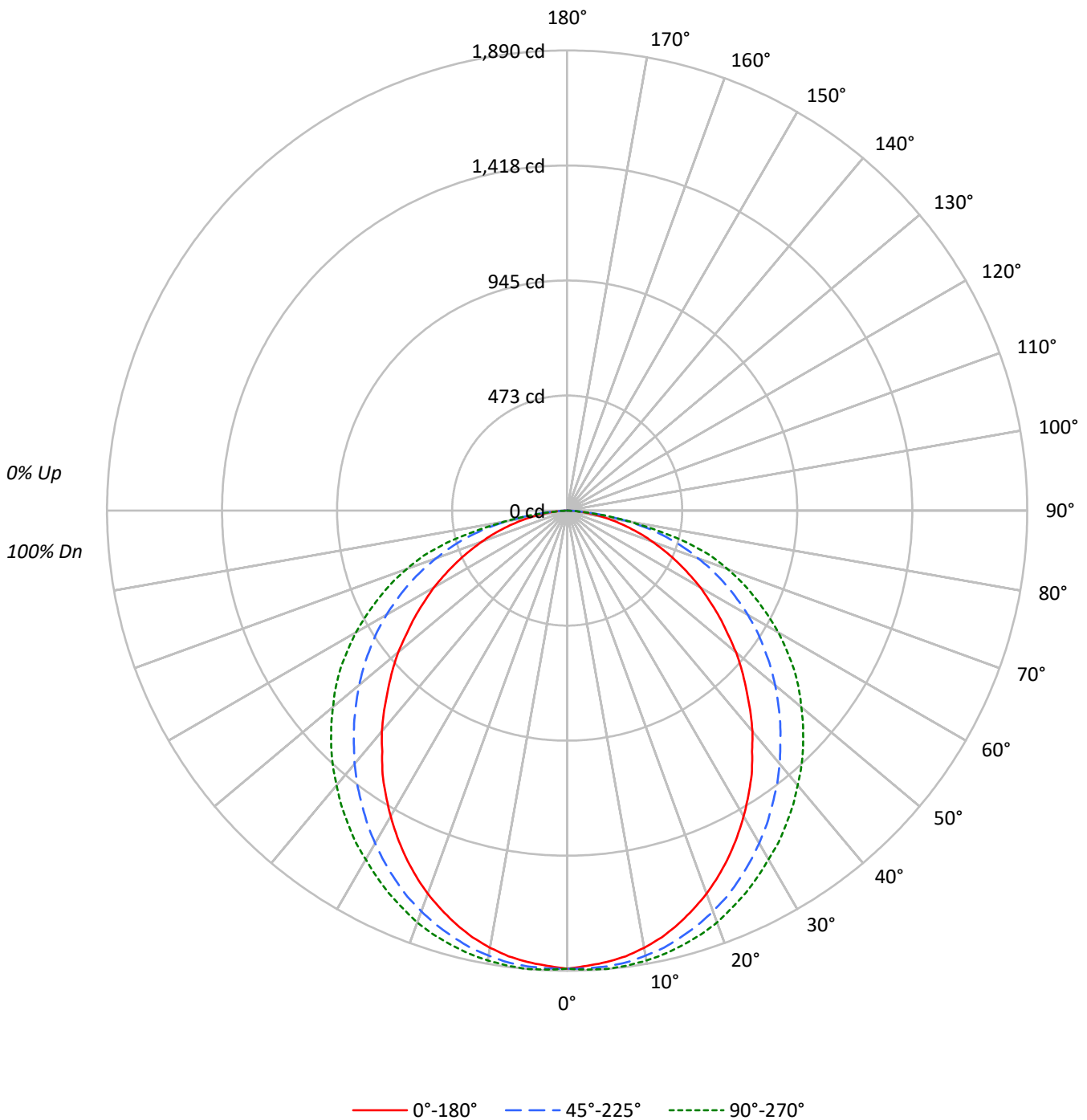
Input Watts (W): 38.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5064	5064	5064
5°	5028	5076	5105
10°	4982	5073	5128
15°	4901	5050	5143
20°	4796	5016	5155
25°	4662	4965	5147
30°	4505	4902	5141
35°	4343	4830	5158
40°	4158	4770	5174
45°	3961	4710	5216
50°	3789	4667	5256
55°	3587	4630	5339
60°	3399	4611	5395
65°	3174	4574	5437
70°	2917	4506	5512
75°	2633	4387	5316
80°	2258	3885	4003
85°	1819	2288	1819



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	178.4	3.3
10°-20°	510.1	9.5
20°-30°	766.2	14.2
30°-40°	913.7	17.0
40°-50°	944.7	17.5
50°-60°	868.5	16.1
60°-70°	691.4	12.8
70°-80°	422.5	7.8
80°-90°	91.8	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°	1454.7	27.0
0°-40°	2368.4	44.0
0°-60°	4181.7	77.6
0°-90°	5387.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5387.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1882	1882	1882	1882	1882	
5°	1862	1867	1879	1887	1890	177
15°	1759	1780	1813	1839	1846	495
25°	1570	1608	1672	1718	1734	722
35°	1322	1378	1470	1547	1570	825
45°	1041	1115	1238	1338	1371	805
55°	764	849	987	1100	1138	684
65°	498	583	718	818	854	494
75°	253	327	422	496	511	270
85°	59	72	74	64	59	68
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1881.8	1881.8	1881.8	1881.8	1881.8
2.5°	1871.7	1874.2	1881.8	1887.2	1887.2
5°	1861.5	1866.6	1879.3	1887.2	1889.8
7.5°	1846.2	1853.8	1871.7	1881.8	1884.7
10°	1823.3	1833.5	1856.4	1871.7	1876.7
12.5°	1795.0	1810.3	1838.6	1858.9	1864.0
15°	1759.3	1779.7	1812.8	1838.6	1846.2
17.5°	1718.3	1743.8	1784.8	1815.6	1825.8
20°	1674.7	1700.5	1751.7	1787.3	1800.1
22.5°	1623.8	1656.9	1715.8	1756.8	1767.0
25°	1570.0	1608.2	1672.2	1718.3	1733.6
27.5°	1511.2	1557.3	1626.3	1682.7	1695.4
30°	1449.8	1498.5	1577.7	1639.1	1654.4
32.5°	1385.8	1442.2	1526.5	1595.5	1616.2
35°	1321.9	1378.2	1470.2	1547.1	1570.0
37.5°	1247.8	1314.3	1416.7	1495.9	1523.9
40°	1183.8	1247.8	1357.8	1444.7	1473.0
42.5°	1112.2	1181.3	1296.4	1390.9	1424.3
45°	1040.7	1114.8	1237.6	1337.5	1370.6
47.5°	974.2	1048.3	1176.2	1281.2	1314.3
50°	905.1	981.8	1114.8	1222.3	1255.4
52.5°	831.0	915.3	1053.4	1160.9	1199.4
55°	764.5	848.8	986.9	1099.5	1138.0
57.5°	695.5	782.3	925.8	1033.0	1069.0
60°	631.5	715.8	856.7	961.4	1002.5
62.5°	562.5	649.3	787.4	889.8	928.3
65°	498.5	583.1	718.4	818.3	853.9
67.5°	434.6	519.2	646.8	741.6	782.3
70°	370.7	455.3	572.7	664.9	700.6
72.5°	314.6	388.8	501.1	585.7	618.8
75°	253.2	327.4	421.9	496.0	511.3
77.5°	196.9	263.4	342.6	375.7	381.1
80°	145.7	196.9	250.7	258.3	258.3
82.5°	97.0	135.5	155.9	158.4	155.9
85°	58.9	71.6	74.1	63.9	58.9
87.5°	20.4	20.4	12.7	7.6	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)