

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: P475159

Luminaire Tested: **22CZ2-75VHE-HRP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475159  
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-L835-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ HRP  
INSERT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6147.4 lumens  
Efficiency: N/A  
Efficacy: 111.4 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

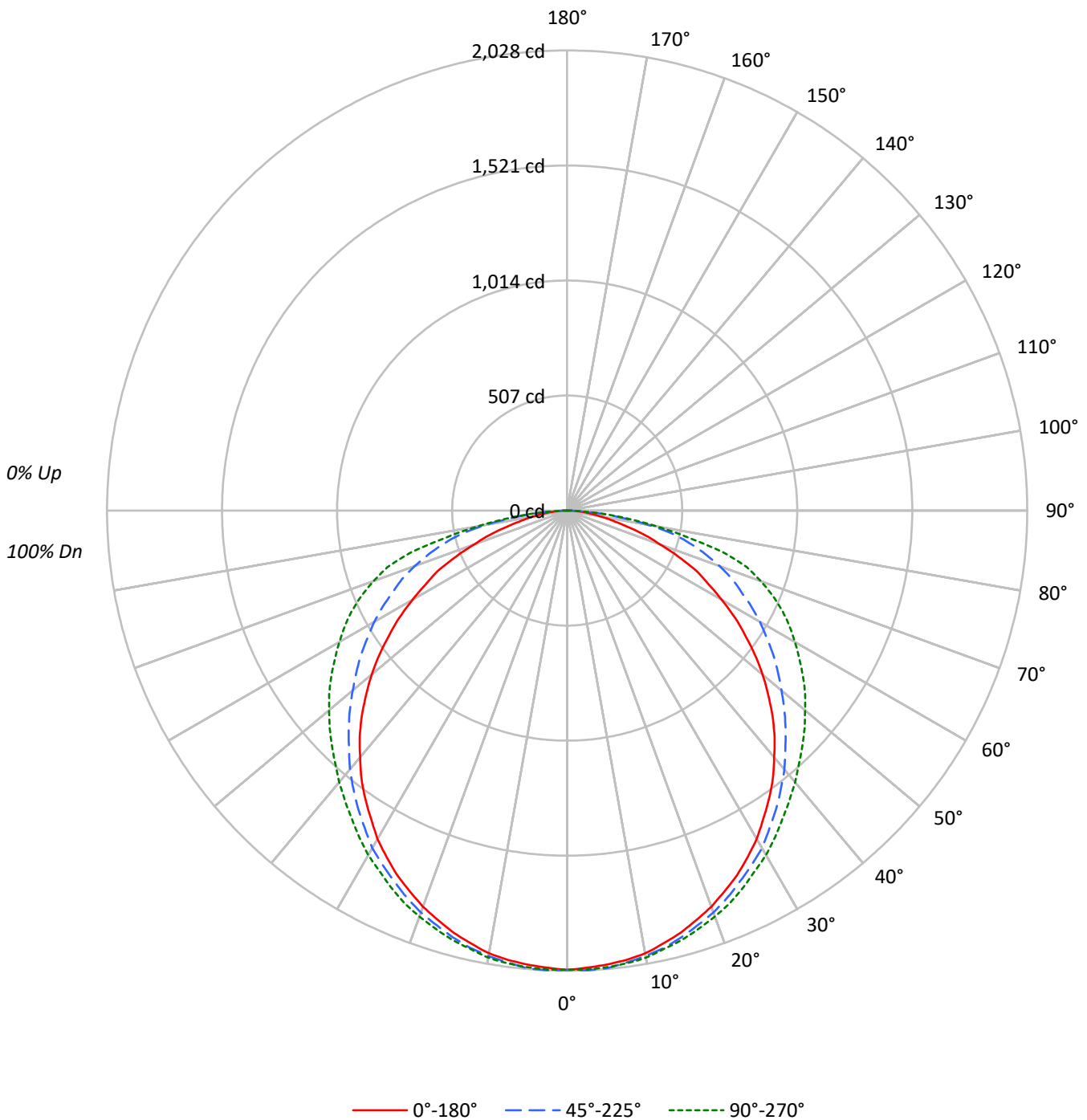
Input Watts (W): 55.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5447	5447	5447
5°	5426	5468	5457
10°	5415	5447	5468
15°	5369	5423	5456
20°	5320	5397	5452
25°	5263	5354	5447
30°	5193	5338	5446
35°	5095	5274	5440
40°	4985	5231	5489
45°	4870	5181	5578
50°	4708	5163	5730
55°	4494	5204	5949
60°	4237	5280	6240
65°	4000	5383	6668
70°	3418	5614	7139
75°	2863	5848	7418
80°	2346	5649	6189
85°	2032	4187	4548



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.9	3.1
10°-20°	548.8	8.9
20°-30°	831.7	13.5
30°-40°	1004.3	16.3
40°-50°	1055.3	17.2
50°-60°	992.9	16.2
60°-70°	827.9	13.5
70°-80°	548.6	8.9
80°-90°	146.2	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°	1572.4	25.6
0°-40°	2576.6	41.9
0°-60°	4624.8	75.2
0°-90°	6147.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6147.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2024	2024	2024	2024	2024	
5°	2009	2012	2024	2024	2020	191
15°	1927	1935	1947	1955	1958	543
25°	1772	1784	1803	1826	1834	816
35°	1551	1567	1606	1640	1656	970
45°	1280	1299	1361	1431	1466	986
55°	958	1001	1109	1222	1268	857
65°	628	682	845	985	1047	611
75°	275	384	562	679	714	299
85°	66	101	136	147	147	77
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2024.1	2024.1	2024.1	2024.1	2024.1
2.5°	2016.6	2020.3	2028.2	2028.2	2024.1
5°	2008.7	2012.5	2024.1	2024.1	2020.3
7.5°	1997.1	2001.2	2008.7	2016.6	2012.5
10°	1981.6	1985.4	1993.3	2001.2	2001.2
12.5°	1954.6	1958.4	1973.8	1977.9	1977.9
15°	1927.2	1935.1	1946.7	1954.6	1958.4
17.5°	1892.6	1900.1	1915.5	1931.3	1931.3
20°	1857.7	1865.2	1884.7	1900.1	1903.9
22.5°	1814.8	1826.5	1846.0	1865.2	1873.1
25°	1772.4	1784.0	1803.2	1826.5	1834.4
27.5°	1721.6	1733.3	1760.7	1787.8	1791.5
30°	1671.3	1682.9	1717.9	1741.2	1752.8
32.5°	1609.3	1624.7	1659.6	1694.6	1706.2
35°	1551.1	1566.8	1605.5	1640.5	1655.9
37.5°	1489.1	1504.5	1547.3	1590.1	1609.3
40°	1419.2	1438.7	1489.1	1535.6	1562.7
42.5°	1353.4	1373.0	1423.3	1485.3	1512.3
45°	1279.8	1298.9	1361.3	1430.8	1465.8
47.5°	1202.0	1225.3	1298.9	1384.6	1419.2
50°	1124.6	1151.6	1233.2	1330.1	1368.8
52.5°	1043.1	1078.0	1171.2	1276.0	1322.2
55°	957.8	1000.6	1109.2	1221.5	1268.1
57.5°	876.2	915.3	1043.1	1163.3	1213.6
60°	787.2	837.5	981.1	1105.0	1159.5
62.5°	701.9	756.4	915.3	1047.2	1105.0
65°	628.2	682.3	845.4	984.8	1047.2
67.5°	531.3	604.9	787.2	919.1	981.1
70°	434.4	535.1	713.5	849.2	907.4
72.5°	360.7	457.7	639.9	775.5	830.0
75°	275.4	384.0	562.5	678.6	713.5
77.5°	205.5	317.9	480.9	539.2	542.9
80°	151.4	244.2	364.5	384.0	399.4
82.5°	104.8	170.6	236.7	259.6	267.5
85°	65.8	100.7	135.6	147.3	147.3
87.5°	34.9	38.7	46.6	46.6	46.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)