

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: P475130

Luminaire Tested: **22CZ2-75VHE-HRP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475130  
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-L830-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ HRP  
INSERT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5932.2 lumens  
Efficiency: N/A  
Efficacy: 107.5 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

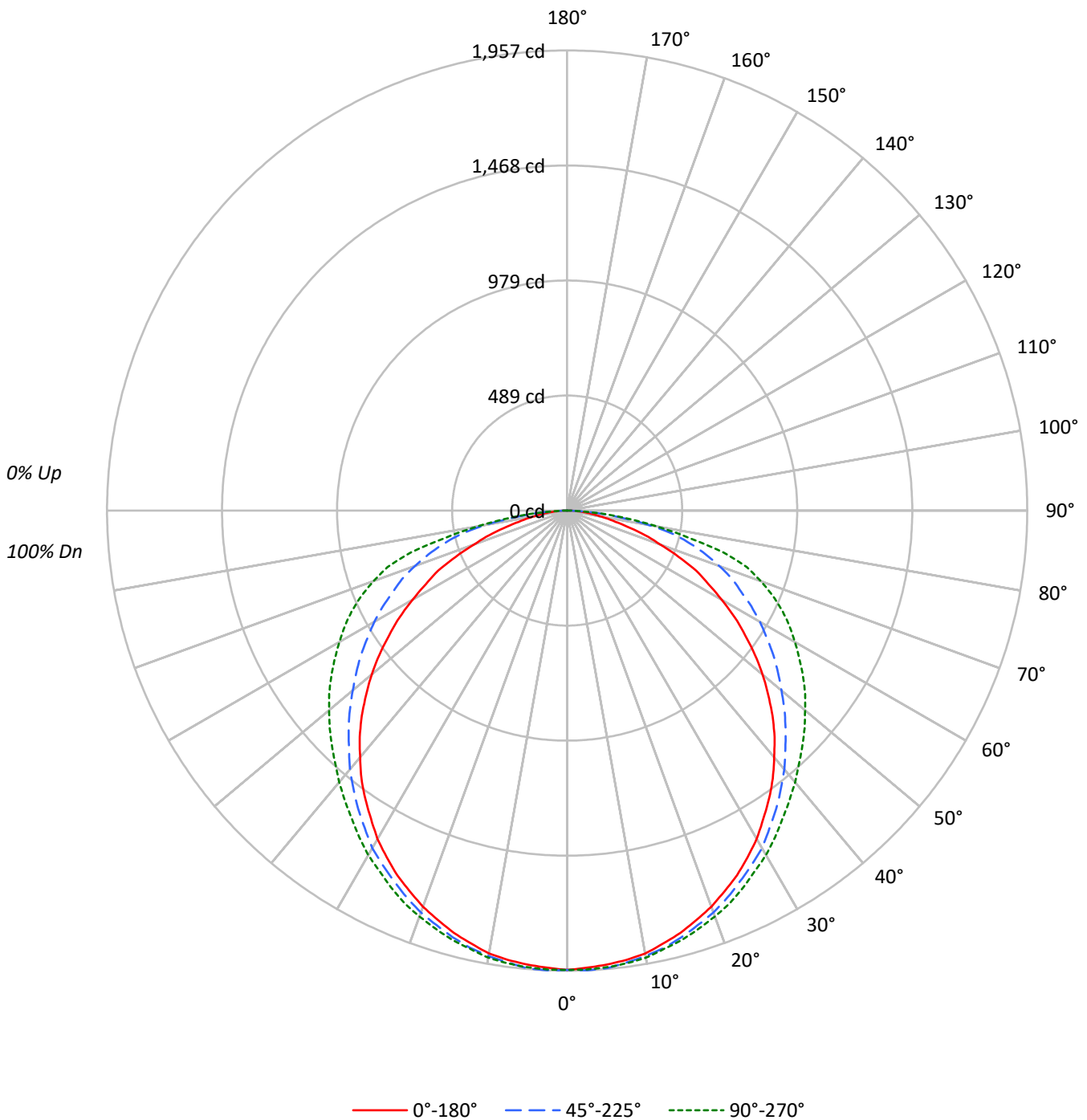
Input Watts (W): 55.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5256	5256	5256
5°	5236	5276	5266
10°	5225	5256	5277
15°	5181	5234	5265
20°	5133	5208	5261
25°	5078	5167	5256
30°	5011	5151	5256
35°	4917	5090	5249
40°	4811	5048	5297
45°	4700	4999	5383
50°	4543	4982	5530
55°	4336	5022	5741
60°	4088	5095	6022
65°	3860	5195	6434
70°	3298	5418	6890
75°	2764	5644	7159
80°	2264	5450	5972
85°	1961	4042	4387



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.1	3.1
10°-20°	529.6	8.9
20°-30°	802.6	13.5
30°-40°	969.1	16.3
40°-50°	1018.3	17.2
50°-60°	958.1	16.2
60°-70°	798.9	13.5
70°-80°	529.4	8.9
80°-90°	141.1	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°	1517.3	25.6
0°-40°	2486.4	41.9
0°-60°	4462.9	75.2
0°-90°	5932.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5932.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1953	1953	1953	1953	1953	
5°	1938	1942	1953	1953	1950	184
15°	1860	1867	1879	1886	1890	524
25°	1710	1722	1740	1762	1770	787
35°	1497	1512	1549	1583	1598	936
45°	1235	1254	1314	1381	1414	951
55°	924	966	1070	1179	1224	827
65°	606	658	816	950	1010	590
75°	266	371	543	655	689	288
85°	64	97	131	142	142	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1953.3	1953.3	1953.3	1953.3	1953.3
2.5°	1946.0	1949.6	1957.3	1957.3	1953.3
5°	1938.4	1942.0	1953.3	1953.3	1949.6
7.5°	1927.2	1931.1	1938.4	1946.0	1942.0
10°	1912.3	1915.9	1923.5	1931.1	1931.1
12.5°	1886.2	1889.8	1904.7	1908.7	1908.7
15°	1859.7	1867.3	1878.6	1886.2	1889.8
17.5°	1826.4	1833.6	1848.5	1863.7	1863.7
20°	1792.6	1799.9	1818.7	1833.6	1837.2
22.5°	1751.3	1762.5	1781.4	1799.9	1807.5
25°	1710.3	1721.6	1740.1	1762.5	1770.2
27.5°	1661.4	1672.6	1699.1	1725.2	1728.8
30°	1612.8	1624.0	1657.8	1680.2	1691.5
32.5°	1553.0	1567.8	1601.6	1635.3	1646.5
35°	1496.8	1512.0	1549.3	1583.1	1597.9
37.5°	1436.9	1451.8	1493.1	1534.5	1553.0
40°	1369.5	1388.3	1436.9	1481.9	1508.0
42.5°	1306.0	1324.9	1373.5	1433.3	1459.4
45°	1235.0	1253.5	1313.7	1380.7	1414.5
47.5°	1159.9	1182.4	1253.5	1336.1	1369.5
50°	1085.2	1111.3	1190.0	1283.6	1320.9
52.5°	1006.5	1040.3	1130.2	1231.3	1275.9
55°	924.2	965.6	1070.4	1178.8	1223.7
57.5°	845.6	883.3	1006.5	1122.6	1171.2
60°	759.6	808.2	946.7	1066.4	1118.9
62.5°	677.3	729.9	883.3	1010.5	1066.4
65°	606.2	658.5	815.8	950.3	1010.5
67.5°	512.7	583.8	759.6	886.9	946.7
70°	419.2	516.3	688.6	819.4	875.7
72.5°	348.1	441.6	617.5	748.4	801.0
75°	265.8	370.6	542.8	654.8	688.6
77.5°	198.3	306.7	464.1	520.3	523.9
80°	146.1	235.7	351.7	370.6	385.4
82.5°	101.2	164.6	228.4	250.5	258.2
85°	63.5	97.2	130.9	142.1	142.1
87.5°	33.7	37.3	45.0	45.0	45.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)