Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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: P475160

Luminaire Tested: **22CZ2-80VHE-HRP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Report Generated By E0454808 / USPTCWHP6056648

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Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P475160
Test Lab:	INNOVATION CENTER(G3)
Issue Date:	02/10/2021
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	METALUX
Catalog Number:	22CZ2-80VHE-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:	6494.1 lumens
Efficiency:	N/A
Efficacy:	110.6 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):	58.7
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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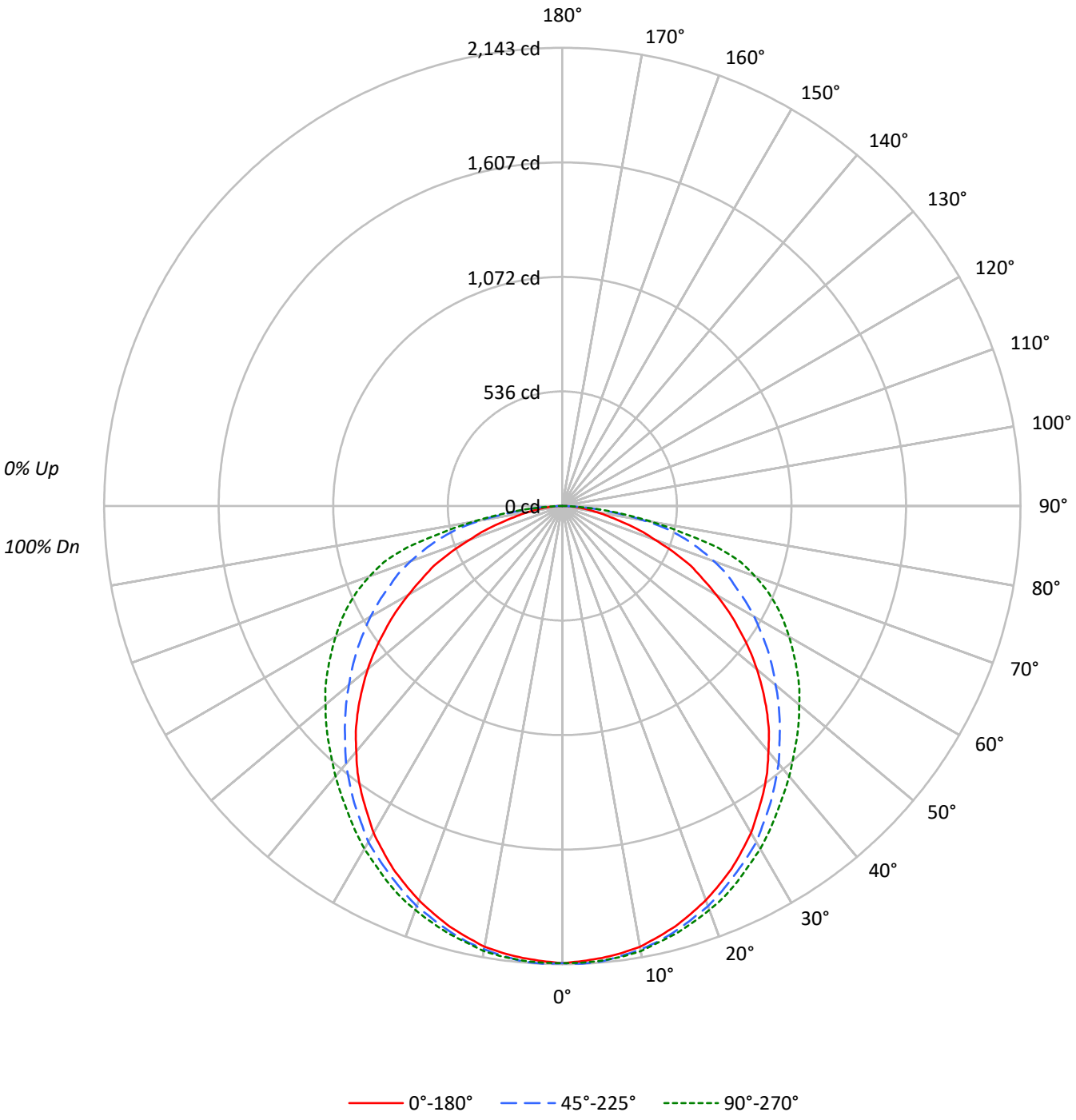
Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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°	5754	5754	5754
5°	5732	5776	5765
10°	5720	5754	5776
15°	5672	5729	5763
20°	5620	5702	5759
25°	5559	5656	5754
30°	5486	5639	5754
35°	5383	5572	5747
40°	5266	5526	5799
45°	5145	5473	5893
50°	4973	5454	6054
55°	4747	5497	6285
60°	4476	5578	6592
65°	4226	5687	7044
70°	3611	5931	7542
75°	3025	6178	7837
80°	2479	5966	6538
85°	2146	4424	4804

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.7	3.1
10°-20°	579.7	8.9
20°-30°	878.6	13.5
30°-40°	1060.9	16.3
40°-50°	1114.8	17.2
50°-60°	1048.9	16.2
60°-70°	874.6	13.5
70°-80°	579.5	8.9
80°-90°	154.4	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°	1661.0	25.6
0°-40°	2721.9	41.9
0°-60°	4885.6	75.2
0°-90°	6494.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6494.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2138	2138	2138	2138	2138	
5°	2122	2126	2138	2138	2134	202
15°	2036	2044	2056	2065	2069	574
25°	1872	1885	1905	1930	1938	862
35°	1638	1655	1696	1733	1749	1025
45°	1352	1372	1438	1512	1548	1041
55°	1012	1057	1172	1290	1340	905
65°	664	721	893	1040	1106	646
75°	291	406	594	717	754	316
85°	70	106	143	156	156	81
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2138.3	2138.3	2138.3	2138.3	2138.3
2.5°	2130.3	2134.3	2142.6	2142.6	2138.3
5°	2122.0	2126.0	2138.3	2138.3	2134.3
7.5°	2109.7	2114.0	2122.0	2130.3	2126.0
10°	2093.4	2097.4	2105.7	2114.0	2114.0
12.5°	2064.8	2068.8	2085.1	2089.4	2089.4
15°	2035.9	2044.2	2056.5	2064.8	2068.8
17.5°	1999.3	2007.3	2023.5	2040.2	2040.2
20°	1962.4	1970.4	1991.0	2007.3	2011.2
22.5°	1917.2	1929.5	1950.1	1970.4	1978.7
25°	1872.3	1884.6	1904.9	1929.5	1937.8
27.5°	1818.7	1831.0	1860.0	1888.6	1892.6
30°	1765.5	1777.8	1814.8	1839.4	1851.7
32.5°	1700.0	1716.3	1753.2	1790.2	1802.5
35°	1638.5	1655.2	1696.1	1733.0	1749.3
37.5°	1573.0	1589.3	1634.6	1679.8	1700.0
40°	1499.2	1519.8	1573.0	1622.3	1650.8
42.5°	1429.7	1450.4	1503.6	1569.1	1597.6
45°	1351.9	1372.2	1438.1	1511.5	1548.4
47.5°	1269.8	1294.4	1372.2	1462.7	1499.2
50°	1188.0	1216.6	1302.7	1405.1	1446.0
52.5°	1101.9	1138.8	1237.2	1348.0	1396.8
55°	1011.8	1057.0	1171.7	1290.4	1339.6
57.5°	925.6	966.9	1101.9	1228.9	1282.1
60°	831.6	884.8	1036.4	1167.4	1224.9
62.5°	741.5	799.0	966.9	1106.2	1167.4
65°	663.7	720.8	893.1	1040.4	1106.2
67.5°	561.3	639.1	831.6	970.9	1036.4
70°	458.9	565.2	753.8	897.1	958.6
72.5°	381.1	483.5	676.0	819.3	876.8
75°	290.9	405.7	594.2	716.9	753.8
77.5°	217.1	335.8	508.1	569.6	573.6
80°	160.0	258.0	385.0	405.7	421.9
82.5°	110.7	180.2	250.1	274.3	282.6
85°	69.5	106.4	143.3	155.6	155.6
87.5°	36.9	40.9	49.2	49.2	49.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)