

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: P274844

Luminaire Tested: **24CZ2-75HE-RDP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P274844  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-75HE-RDP-UNV-L935-CD1-U  
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI  
Light Source: (392) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4306.0 lumens  
Efficiency: N/A  
Efficacy: 77.7 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

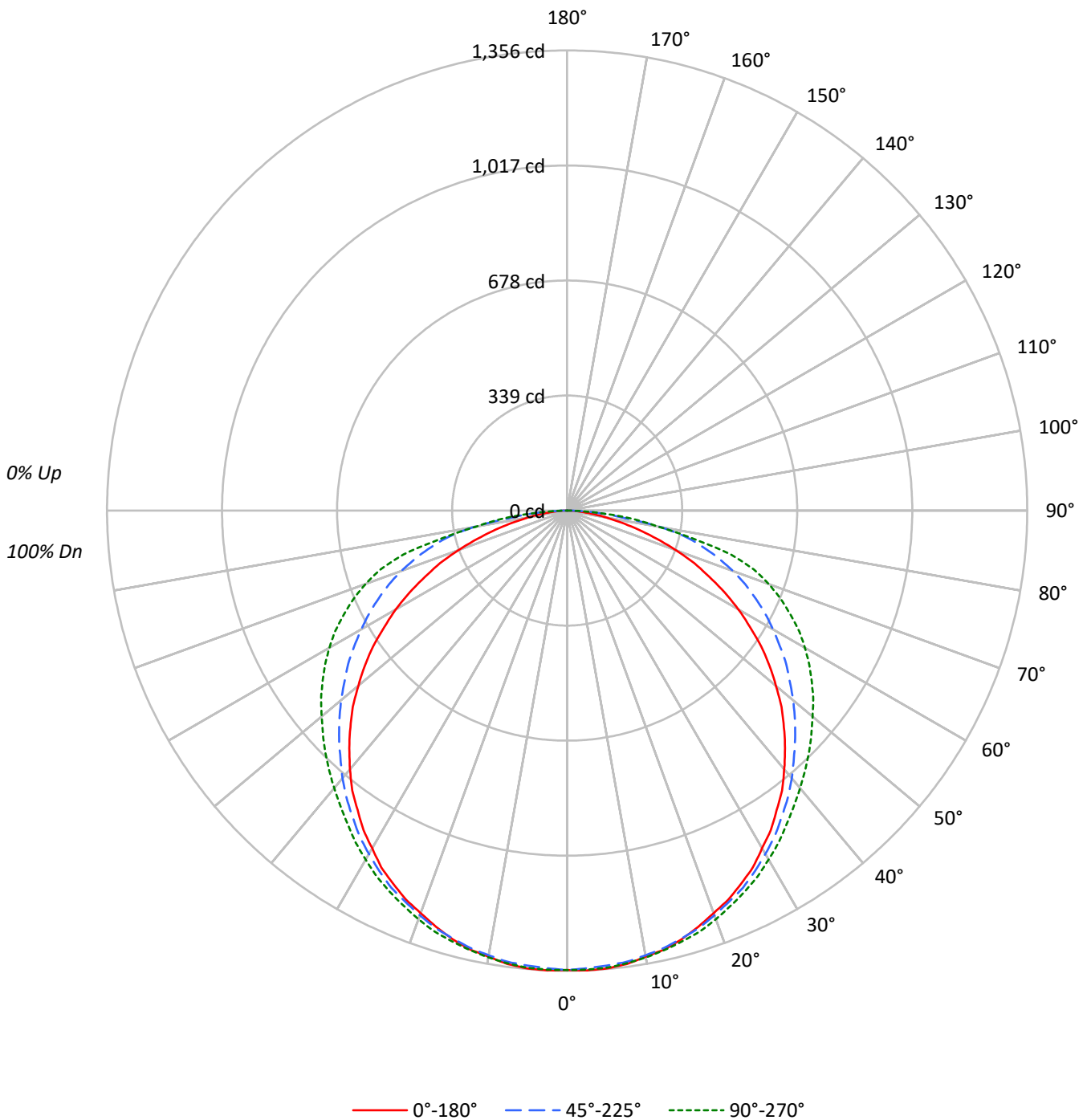
Input Watts (W): 55.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1822	1822	1822
5°	1829	1817	1826
10°	1824	1818	1827
15°	1821	1818	1830
20°	1807	1817	1835
25°	1801	1820	1839
30°	1785	1815	1845
35°	1768	1810	1852
40°	1748	1808	1876
45°	1719	1808	1918
50°	1681	1820	1976
55°	1638	1849	2064
60°	1569	1885	2178
65°	1469	1952	2312
70°	1336	2042	2487
75°	1133	2154	2598
80°	893	2168	2101
85°	659	1649	1846



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.5	3.0
10°-20°	369.7	8.6
20°-30°	565.3	13.1
30°-40°	691.1	16.0
40°-50°	736.6	17.1
50°-60°	704.3	16.4
60°-70°	596.6	13.9
70°-80°	401.0	9.3
80°-90°	113.1	2.6
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°	1063.4	24.7
0°-40°	1754.5	40.7
0°-60°	3195.4	74.2
0°-90°	4306.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4306.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1354	1354	1354	1354	1354	
5°	1354	1352	1346	1352	1352	129
15°	1307	1307	1305	1316	1314	369
25°	1213	1217	1226	1237	1239	559
35°	1076	1085	1102	1123	1128	674
45°	904	918	950	991	1008	697
55°	698	724	788	850	880	622
65°	461	508	613	694	726	458
75°	218	297	414	485	500	233
85°	43	88	107	115	120	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1354.1	1354.1	1354.1	1354.1	1354.1
2.5°	1356.2	1356.2	1349.8	1354.1	1354.1
5°	1354.1	1352.0	1345.6	1352.0	1352.0
7.5°	1347.7	1345.6	1341.3	1347.7	1345.6
10°	1334.9	1334.9	1330.6	1337.0	1337.0
12.5°	1324.2	1322.1	1319.9	1328.5	1326.3
15°	1307.1	1307.1	1305.0	1315.7	1313.5
17.5°	1285.8	1287.9	1290.0	1298.6	1300.7
20°	1262.3	1266.5	1268.7	1281.5	1281.5
22.5°	1240.9	1243.1	1247.3	1260.1	1260.1
25°	1213.1	1217.4	1226.0	1236.6	1238.8
27.5°	1185.4	1187.5	1198.2	1213.1	1215.3
30°	1149.1	1155.5	1168.3	1185.4	1187.5
32.5°	1117.0	1123.4	1138.4	1155.5	1159.8
35°	1076.5	1085.0	1102.1	1123.4	1127.7
37.5°	1040.1	1046.6	1067.9	1091.4	1097.8
40°	995.3	1008.1	1029.5	1057.2	1067.9
42.5°	950.4	963.3	988.9	1025.2	1038.0
45°	903.5	918.4	950.4	991.0	1008.1
47.5°	856.5	873.6	909.9	956.9	976.1
50°	803.1	824.4	869.3	922.7	944.0
52.5°	751.8	777.4	826.6	886.4	914.1
55°	698.4	724.0	788.1	850.1	880.0
57.5°	638.6	672.8	743.3	813.7	845.8
60°	583.1	615.1	700.6	777.4	809.5
62.5°	523.3	566.0	657.8	739.0	771.0
65°	461.3	508.3	613.0	694.1	726.2
67.5°	405.8	457.1	568.1	649.3	681.3
70°	339.6	403.7	519.0	600.2	632.2
72.5°	277.7	348.1	467.7	546.8	576.7
75°	217.9	296.9	414.4	484.8	499.8
77.5°	162.3	245.6	358.8	388.7	378.0
80°	115.3	196.5	279.8	264.8	271.2
82.5°	74.8	149.5	173.0	196.5	202.9
85°	42.7	87.6	106.8	115.3	119.6
87.5°	19.2	32.0	42.7	42.7	40.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)