

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: P276778

Luminaire Tested: **24CZ2-75HE-RDP-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276778  
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-L83050-W2A1-U-3500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4796.0 lumens  
Efficiency: N/A  
Efficacy: 82.1 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

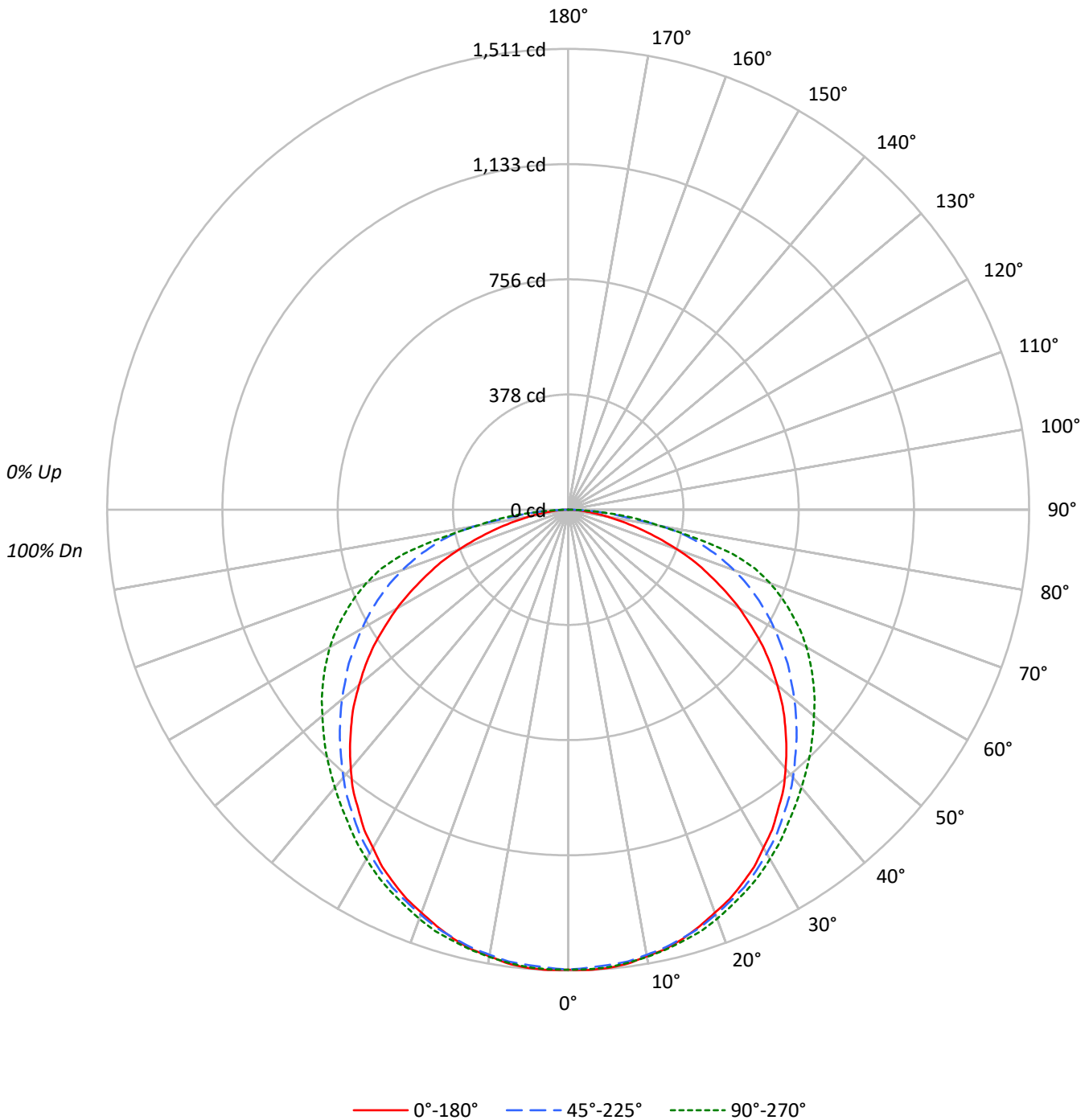
Input Watts (W): 58.404  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2029	2029	2029
5°	2037	2024	2034
10°	2031	2025	2035
15°	2028	2025	2038
20°	2013	2023	2044
25°	2006	2027	2048
30°	1988	2022	2055
35°	1969	2016	2063
40°	1947	2014	2089
45°	1915	2014	2136
50°	1872	2027	2201
55°	1825	2059	2299
60°	1748	2100	2426
65°	1636	2174	2575
70°	1488	2274	2770
75°	1261	2399	2894
80°	996	2414	2341
85°	735	1836	2056



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.1	3.0
10°-20°	411.7	8.6
20°-30°	629.7	13.1
30°-40°	769.7	16.0
40°-50°	820.4	17.1
50°-60°	784.4	16.4
60°-70°	664.5	13.9
70°-80°	446.6	9.3
80°-90°	126.0	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°	1184.5	24.7
0°-40°	1954.2	40.7
0°-60°	3559.0	74.2
0°-90°	4796.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4796.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1508	1508	1508	1508	1508	
5°	1508	1506	1499	1506	1506	143
15°	1456	1456	1454	1465	1463	410
25°	1351	1356	1366	1377	1380	623
35°	1199	1208	1228	1251	1256	751
45°	1006	1023	1059	1104	1123	776
55°	778	806	878	947	980	693
65°	514	566	683	773	809	510
75°	243	331	462	540	557	260
85°	48	98	119	128	133	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1508.2	1508.2	1508.2	1508.2	1508.2
2.5°	1510.6	1510.6	1503.4	1508.2	1508.2
5°	1508.2	1505.8	1498.7	1505.8	1505.8
7.5°	1501.1	1498.7	1493.9	1501.1	1498.7
10°	1486.8	1486.8	1482.0	1489.2	1489.2
12.5°	1474.9	1472.5	1470.1	1479.7	1477.3
15°	1455.9	1455.9	1453.5	1465.4	1463.0
17.5°	1432.1	1434.5	1436.8	1446.4	1448.7
20°	1405.9	1410.7	1413.1	1427.3	1427.3
22.5°	1382.1	1384.5	1389.3	1403.5	1403.5
25°	1351.2	1356.0	1365.5	1377.4	1379.7
27.5°	1320.3	1322.7	1334.5	1351.2	1353.6
30°	1279.8	1287.0	1301.2	1320.3	1322.7
32.5°	1244.2	1251.3	1267.9	1287.0	1291.7
35°	1199.0	1208.5	1227.5	1251.3	1256.0
37.5°	1158.5	1165.6	1189.4	1215.6	1222.7
40°	1108.6	1122.8	1146.6	1177.5	1189.4
42.5°	1058.6	1072.9	1101.4	1141.9	1156.1
45°	1006.3	1022.9	1058.6	1103.8	1122.8
47.5°	953.9	973.0	1013.4	1065.7	1087.1
50°	894.5	918.2	968.2	1027.7	1051.5
52.5°	837.4	865.9	920.6	987.2	1018.2
55°	777.9	806.4	877.8	946.8	980.1
57.5°	711.3	749.3	827.8	906.4	942.0
60°	649.4	685.1	780.3	865.9	901.6
62.5°	582.8	630.4	732.7	823.1	858.8
65°	513.8	566.2	682.7	773.1	808.8
67.5°	452.0	509.1	632.8	723.2	758.9
70°	378.2	449.6	578.1	668.5	704.1
72.5°	309.3	387.8	521.0	609.0	642.3
75°	242.6	330.7	461.5	540.0	556.7
77.5°	180.8	273.6	399.7	433.0	421.1
80°	128.5	218.9	311.6	295.0	302.1
82.5°	83.3	166.5	192.7	218.9	226.0
85°	47.6	97.5	118.9	128.5	133.2
87.5°	21.4	35.7	47.6	47.6	45.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)