

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: P276855

Luminaire Tested: **24CZ2-75HE-RDP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276855  
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-L93050-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4479.5 lumens  
Efficiency: N/A  
Efficacy: 73.6 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

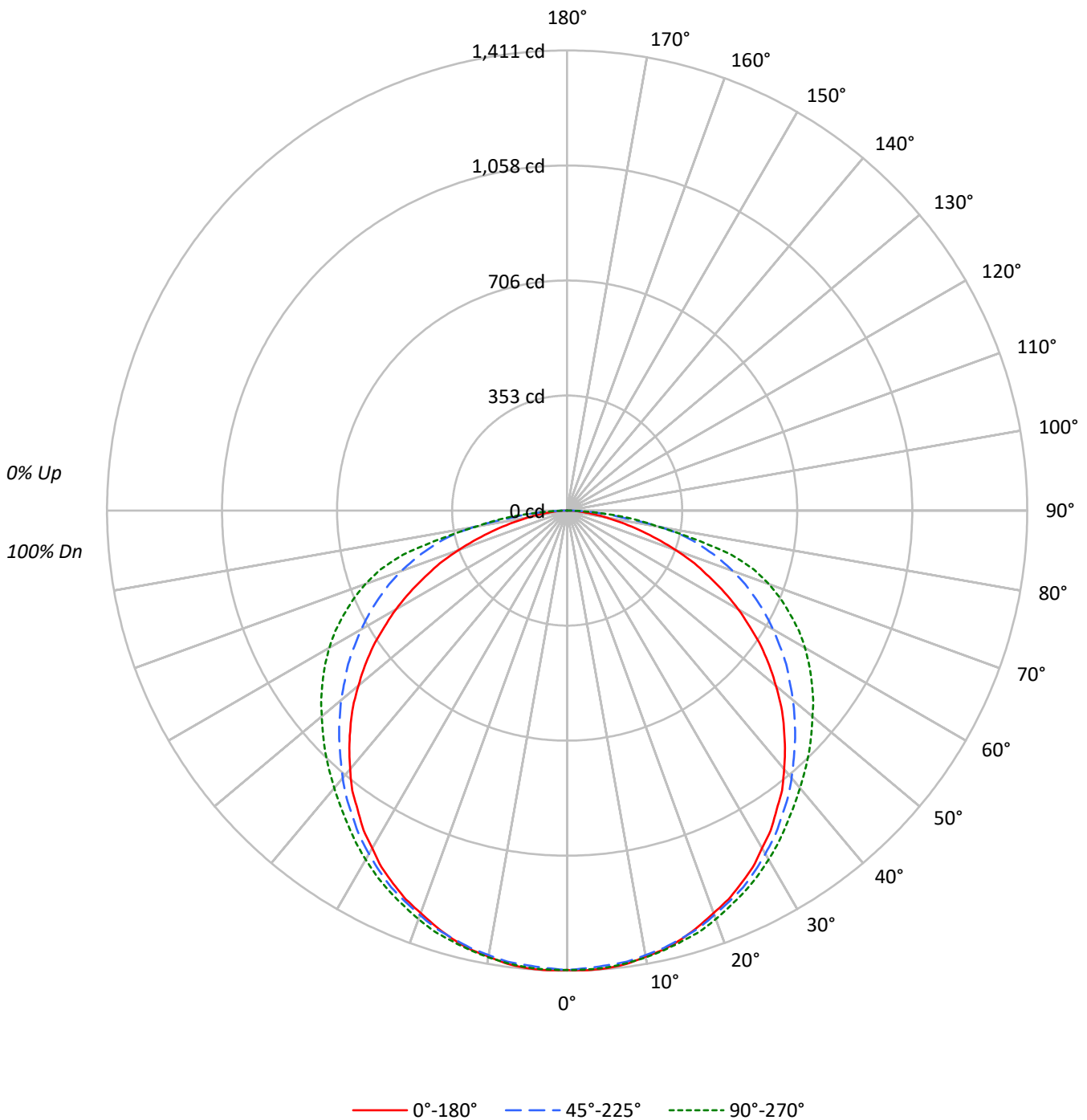
Input Watts (W): 60.856968  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1895	1895	1895
5°	1903	1891	1900
10°	1897	1891	1900
15°	1894	1891	1903
20°	1880	1890	1909
25°	1874	1893	1913
30°	1857	1888	1919
35°	1839	1883	1927
40°	1819	1881	1951
45°	1788	1881	1995
50°	1749	1893	2056
55°	1704	1923	2147
60°	1632	1961	2266
65°	1528	2030	2405
70°	1390	2124	2587
75°	1178	2241	2703
80°	930	2256	2187
85°	685	1715	1920



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.6	3.0
10°-20°	384.6	8.6
20°-30°	588.1	13.1
30°-40°	718.9	16.0
40°-50°	766.2	17.1
50°-60°	732.6	16.4
60°-70°	620.6	13.9
70°-80°	417.1	9.3
80°-90°	117.7	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°	1106.3	24.7
0°-40°	1825.2	40.7
0°-60°	3324.1	74.2
0°-90°	4479.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4479.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1409	1409	1409	1409	1409	
5°	1409	1406	1400	1406	1406	134
15°	1360	1360	1358	1369	1366	383
25°	1262	1266	1275	1286	1289	582
35°	1120	1129	1146	1169	1173	702
45°	940	955	989	1031	1049	725
55°	727	753	820	884	915	647
65°	480	529	638	722	755	476
75°	227	309	431	504	520	243
85°	44	91	111	120	124	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1408.7	1408.7	1408.7	1408.7	1408.7
2.5°	1410.9	1410.9	1404.2	1408.7	1408.7
5°	1408.7	1406.4	1399.8	1406.4	1406.4
7.5°	1402.0	1399.8	1395.3	1402.0	1399.8
10°	1388.7	1388.7	1384.2	1390.9	1390.9
12.5°	1377.6	1375.3	1373.1	1382.0	1379.8
15°	1359.8	1359.8	1357.6	1368.7	1366.5
17.5°	1337.6	1339.8	1342.0	1350.9	1353.1
20°	1313.1	1317.6	1319.8	1333.1	1333.1
22.5°	1290.9	1293.1	1297.6	1310.9	1310.9
25°	1262.0	1266.5	1275.4	1286.5	1288.7
27.5°	1233.1	1235.4	1246.5	1262.0	1264.2
30°	1195.4	1202.0	1215.4	1233.1	1235.4
32.5°	1162.0	1168.7	1184.3	1202.0	1206.5
35°	1119.8	1128.7	1146.5	1168.7	1173.1
37.5°	1082.1	1088.7	1110.9	1135.4	1142.0
40°	1035.4	1048.7	1070.9	1099.8	1110.9
42.5°	988.7	1002.1	1028.7	1066.5	1079.8
45°	939.9	955.4	988.7	1030.9	1048.7
47.5°	891.0	908.7	946.5	995.4	1015.4
50°	835.4	857.6	904.3	959.8	982.1
52.5°	782.1	808.8	859.9	922.1	951.0
55°	726.6	753.2	819.9	884.3	915.4
57.5°	664.3	699.9	773.2	846.5	879.9
60°	606.6	639.9	728.8	808.8	842.1
62.5°	544.4	588.8	684.3	768.8	802.1
65°	479.9	528.8	637.7	722.1	755.4
67.5°	422.2	475.5	591.0	675.4	708.8
70°	353.3	419.9	539.9	624.3	657.7
72.5°	288.8	362.2	486.6	568.8	599.9
75°	226.6	308.8	431.0	504.4	519.9
77.5°	168.9	255.5	373.3	404.4	393.3
80°	120.0	204.4	291.1	275.5	282.2
82.5°	77.8	155.5	180.0	204.4	211.1
85°	44.4	91.1	111.1	120.0	124.4
87.5°	20.0	33.3	44.4	44.4	42.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)