

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: P277103

Luminaire Tested: **24CZ2-75HE-RDP-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277103  
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-L92765-W2A1-U-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4433.4 lumens  
Efficiency: N/A  
Efficacy: 74.1 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

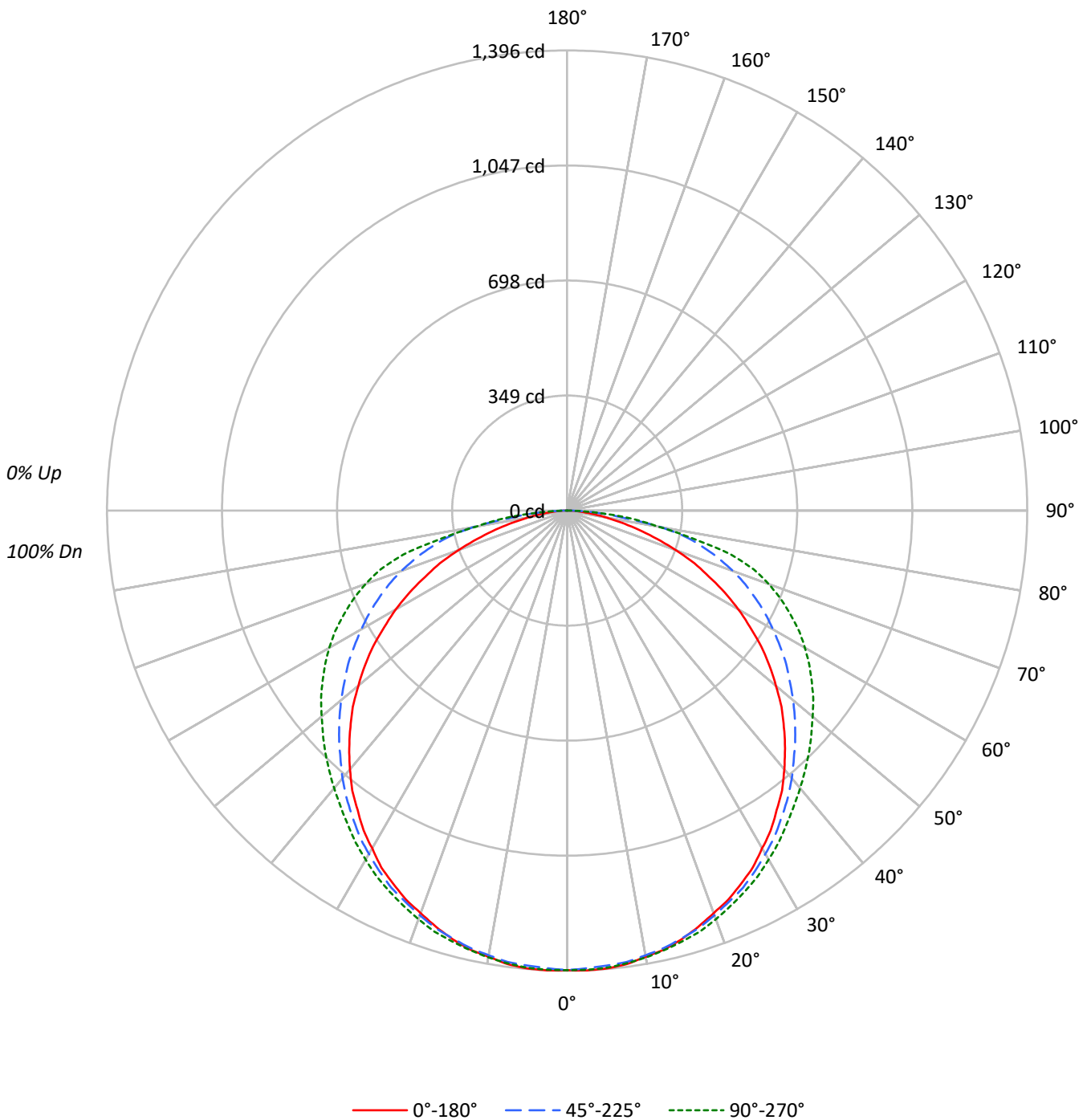
Input Watts (W): 59.799  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1876	1876	1876
5°	1883	1871	1880
10°	1878	1872	1881
15°	1875	1872	1884
20°	1861	1870	1889
25°	1854	1874	1893
30°	1838	1869	1899
35°	1820	1864	1907
40°	1800	1862	1931
45°	1770	1862	1975
50°	1731	1873	2035
55°	1687	1903	2125
60°	1615	1941	2243
65°	1512	2009	2380
70°	1375	2102	2561
75°	1166	2218	2675
80°	920	2232	2164
85°	679	1697	1900



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.3	3.0
10°-20°	380.6	8.6
20°-30°	582.0	13.1
30°-40°	711.5	16.0
40°-50°	758.3	17.1
50°-60°	725.1	16.4
60°-70°	614.2	13.9
70°-80°	412.8	9.3
80°-90°	116.4	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°	1094.9	24.7
0°-40°	1806.4	40.7
0°-60°	3289.9	74.2
0°-90°	4433.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4433.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1394	1394	1394	1394	1394	
5°	1394	1392	1385	1392	1392	132
15°	1346	1346	1344	1355	1352	379
25°	1249	1253	1262	1273	1275	576
35°	1108	1117	1135	1157	1161	694
45°	930	946	979	1020	1038	717
55°	719	746	811	875	906	640
65°	475	523	631	715	748	472
75°	224	306	427	499	515	240
85°	44	90	110	119	123	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1394.2	1394.2	1394.2	1394.2	1394.2
2.5°	1396.4	1396.4	1389.8	1394.2	1394.2
5°	1394.2	1392.0	1385.4	1392.0	1392.0
7.5°	1387.6	1385.4	1381.0	1387.6	1385.4
10°	1374.4	1374.4	1370.0	1376.6	1376.6
12.5°	1363.4	1361.2	1359.0	1367.8	1365.6
15°	1345.8	1345.8	1343.6	1354.6	1352.4
17.5°	1323.8	1326.0	1328.2	1337.0	1339.2
20°	1299.6	1304.0	1306.2	1319.4	1319.4
22.5°	1277.6	1279.8	1284.2	1297.4	1297.4
25°	1249.0	1253.4	1262.2	1273.2	1275.4
27.5°	1220.4	1222.6	1233.6	1249.0	1251.2
30°	1183.1	1189.7	1202.9	1220.4	1222.6
32.5°	1150.1	1156.7	1172.1	1189.7	1194.1
35°	1108.3	1117.1	1134.7	1156.7	1161.1
37.5°	1070.9	1077.5	1099.5	1123.7	1130.3
40°	1024.7	1037.9	1059.9	1088.5	1099.5
42.5°	978.6	991.7	1018.1	1055.5	1068.7
45°	930.2	945.6	978.6	1020.3	1037.9
47.5°	881.8	899.4	936.8	985.1	1004.9
50°	826.8	848.8	895.0	950.0	972.0
52.5°	774.0	800.4	851.0	912.6	941.2
55°	719.1	745.5	811.4	875.2	906.0
57.5°	657.5	692.7	765.3	837.8	870.8
60°	600.3	633.3	721.3	800.4	833.4
62.5°	538.8	582.7	677.3	760.9	793.8
65°	475.0	523.4	631.1	714.7	747.7
67.5°	417.8	470.6	584.9	668.5	701.5
70°	349.6	415.6	534.4	617.9	650.9
72.5°	285.9	358.4	481.6	562.9	593.7
75°	224.3	305.7	426.6	499.2	514.6
77.5°	167.1	252.9	369.4	400.2	389.2
80°	118.7	202.3	288.1	272.7	279.3
82.5°	77.0	153.9	178.1	202.3	208.9
85°	44.0	90.2	109.9	118.7	123.1
87.5°	19.8	33.0	44.0	44.0	41.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)