

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: P276259

Luminaire Tested: **24CZ2-75HE-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276259  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-75HE-UNV-L92765-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5810.3 lumens  
Efficiency: N/A  
Efficacy: 100.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

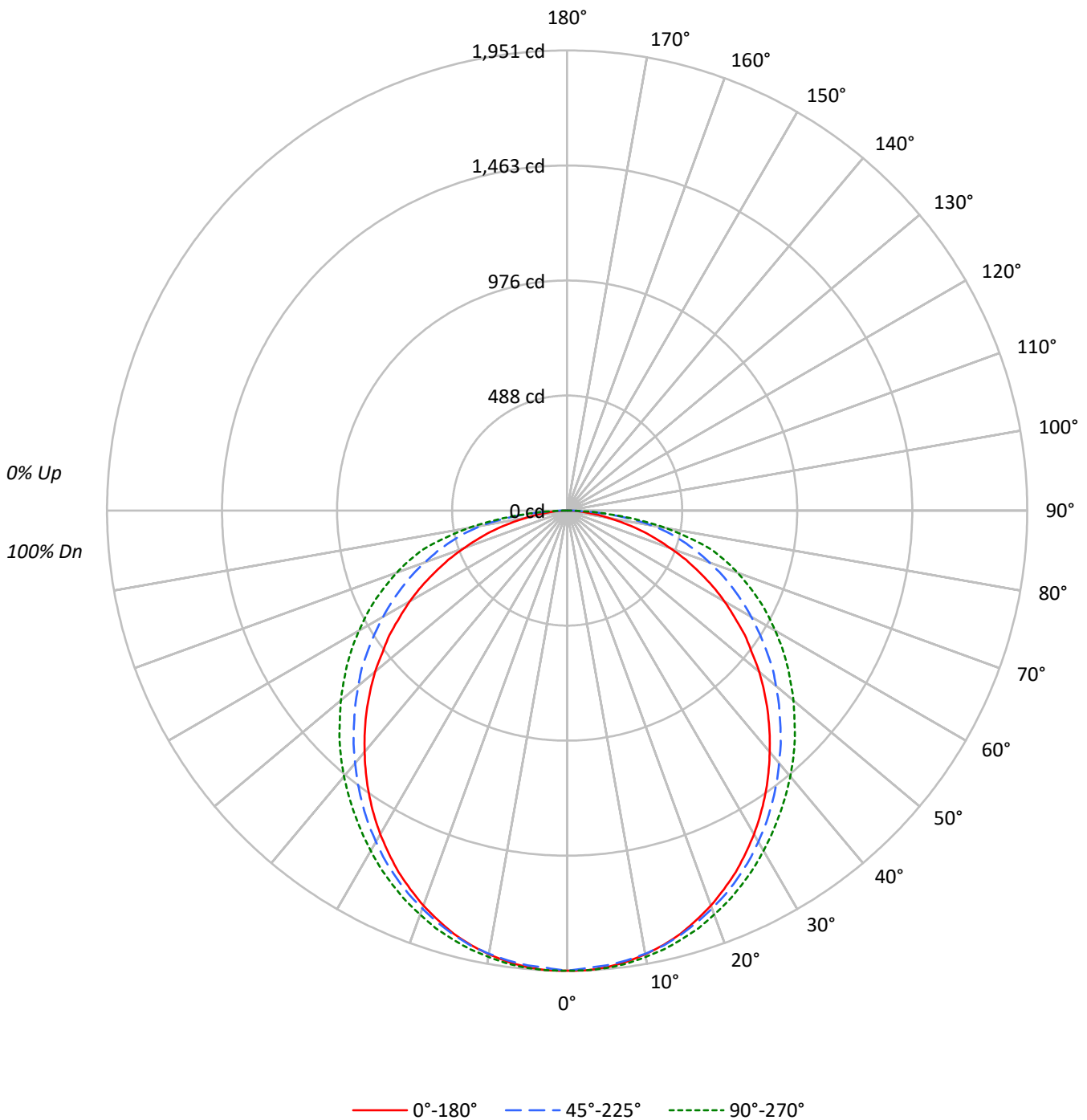
Input Watts (W): 57.846  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	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	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
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	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

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

	0°	45°	90°
0°	2625	2625	2625
5°	2624	2614	2630
10°	2610	2607	2626
15°	2588	2593	2620
20°	2552	2571	2610
25°	2510	2548	2600
30°	2461	2519	2588
35°	2408	2488	2580
40°	2347	2456	2585
45°	2288	2432	2598
50°	2224	2419	2622
55°	2156	2415	2670
60°	2072	2426	2740
65°	1963	2463	2858
70°	1823	2525	3021
75°	1664	2651	3276
80°	1368	2854	3275
85°	1048	2634	2814



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.5	3.2
10°-20°	526.7	9.1
20°-30°	792.6	13.6
30°-40°	949.9	16.3
40°-50°	989.9	17.0
50°-60°	921.0	15.9
60°-70°	758.5	13.1
70°-80°	516.6	8.9
80°-90°	170.5	2.9
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°	1503.9	25.9
0°-40°	2453.8	42.2
0°-60°	4364.6	75.1
0°-90°	5810.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5810.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1951	1951	1951	1951	1951	
5°	1943	1943	1935	1945	1947	184
15°	1858	1860	1862	1879	1881	523
25°	1691	1699	1716	1745	1751	778
35°	1466	1484	1514	1555	1571	916
45°	1202	1228	1278	1342	1365	927
55°	919	950	1030	1111	1138	819
65°	617	669	774	865	898	612
75°	320	392	510	601	630	337
85°	68	132	171	182	182	84
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1950.8	1950.8	1950.8	1950.8	1950.8
2.5°	1950.8	1950.8	1941.1	1950.8	1950.8
5°	1943.0	1943.0	1935.3	1945.0	1946.9
7.5°	1929.5	1931.4	1923.7	1935.3	1937.2
10°	1910.1	1912.0	1908.1	1919.8	1921.7
12.5°	1886.8	1888.7	1888.7	1902.3	1904.3
15°	1857.7	1859.7	1861.6	1879.0	1881.0
17.5°	1820.9	1826.7	1830.6	1851.9	1855.8
20°	1782.1	1787.9	1795.7	1818.9	1822.8
22.5°	1737.5	1745.2	1758.8	1784.0	1789.8
25°	1691.0	1698.7	1716.2	1745.2	1751.1
27.5°	1638.6	1650.2	1671.6	1702.6	1710.3
30°	1584.3	1595.9	1621.1	1654.1	1665.7
32.5°	1526.1	1541.6	1570.7	1607.6	1619.2
35°	1466.0	1483.5	1514.5	1555.2	1570.7
37.5°	1402.0	1421.4	1458.3	1502.9	1522.2
40°	1336.1	1359.4	1398.1	1450.5	1471.8
42.5°	1270.2	1291.5	1340.0	1396.2	1419.5
45°	1202.3	1227.5	1277.9	1341.9	1365.2
47.5°	1132.5	1157.7	1217.8	1285.7	1307.0
50°	1062.7	1087.9	1155.7	1227.5	1252.7
52.5°	987.0	1020.0	1097.6	1169.3	1194.5
55°	919.2	950.2	1029.7	1111.1	1138.3
57.5°	841.6	878.4	965.7	1051.0	1080.1
60°	769.8	808.6	901.7	989.0	1018.1
62.5°	696.2	738.8	837.7	926.9	959.9
65°	616.7	669.0	773.7	864.9	897.8
67.5°	544.9	599.2	709.7	802.8	831.9
70°	463.5	529.4	641.9	734.9	767.9
72.5°	393.7	459.6	577.9	669.0	702.0
75°	320.0	391.7	510.0	601.1	630.2
77.5°	246.3	325.8	444.1	513.9	523.6
80°	176.5	259.8	368.4	409.2	422.7
82.5°	124.1	199.7	271.5	298.6	306.4
85°	67.9	131.9	170.6	182.3	182.3
87.5°	29.1	56.2	67.9	69.8	71.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)