

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: P276542

Luminaire Tested: **24CZ2-70HE-S-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276542  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-70HE-S-UNV-L82765-W2A1-U-6500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7325.8 lumens  
Efficiency: N/A  
Efficacy: 130.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

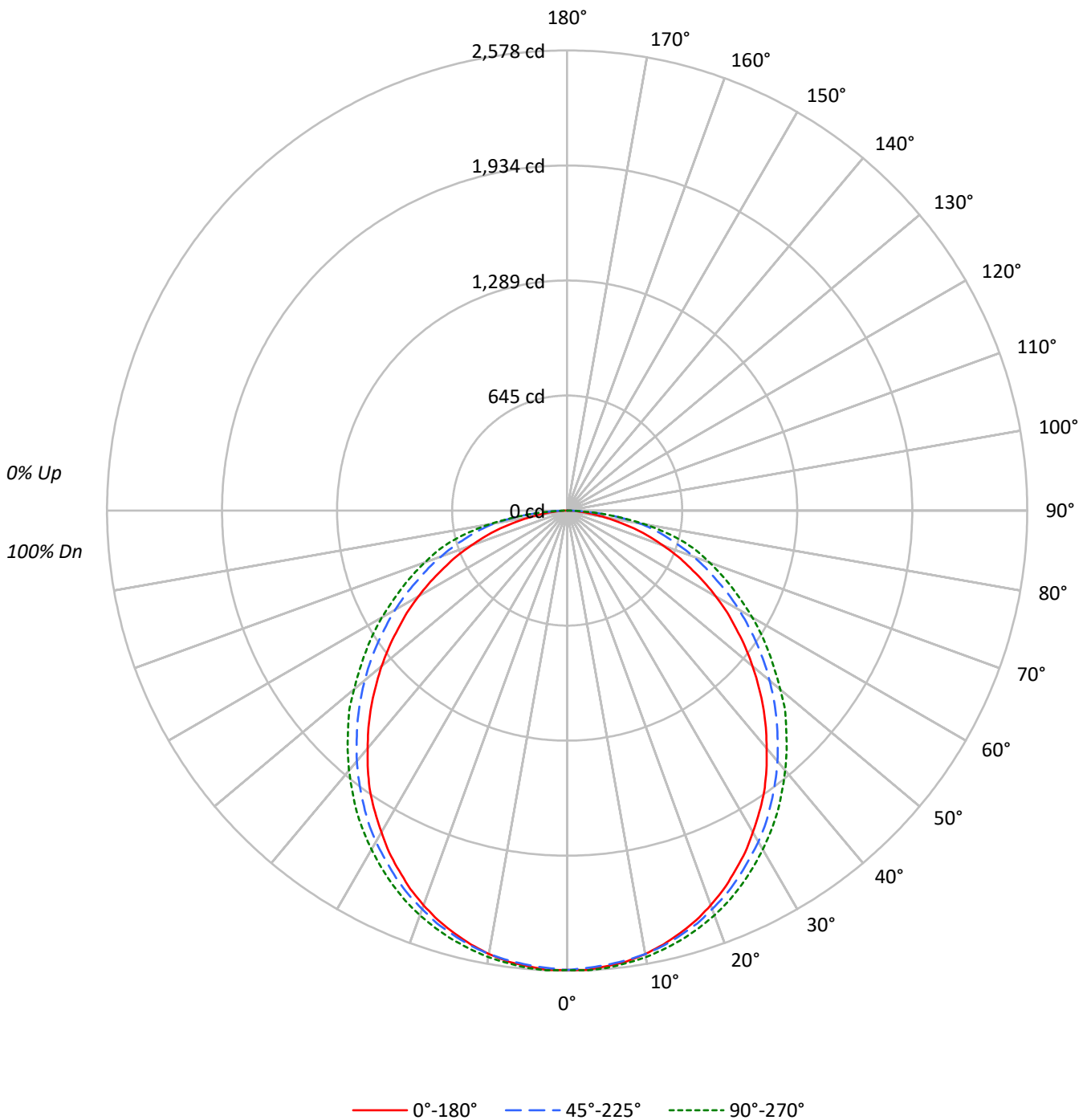
Input Watts (W): 56.079  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	3463	3463	3463
5°	3460	3451	3473
10°	3446	3446	3472
15°	3413	3429	3465
20°	3368	3402	3455
25°	3306	3368	3434
30°	3232	3330	3406
35°	3161	3276	3379
40°	3053	3221	3339
45°	2953	3157	3303
50°	2840	3098	3263
55°	2713	3040	3231
60°	2586	2993	3225
65°	2422	2941	3245
70°	2243	2957	3332
75°	2008	3012	3520
80°	1623	3192	3443
85°	1221	2802	2729



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	243.6	3.3
10°-20°	696.2	9.5
20°-30°	1046.5	14.3
30°-40°	1246.6	17.0
40°-50°	1275.8	17.4
50°-60°	1148.6	15.7
60°-70°	902.0	12.3
70°-80°	585.4	8.0
80°-90°	181.1	2.5
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°	1986.3	27.1
0°-40°	3232.9	44.1
0°-60°	5657.3	77.2
0°-90°	7325.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7325.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2574	2574	2574	2574	2574	
5°	2562	2567	2555	2569	2571	243
15°	2450	2457	2462	2483	2488	691
25°	2227	2246	2269	2306	2313	1026
35°	1924	1948	1994	2043	2057	1201
45°	1552	1589	1659	1722	1736	1197
55°	1156	1208	1296	1364	1378	1037
65°	761	819	924	1001	1019	757
75°	386	461	579	658	677	409
85°	79	147	182	177	177	96
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2573.6	2573.6	2573.6	2573.6	2573.6
2.5°	2575.9	2575.9	2564.3	2575.9	2578.2
5°	2561.9	2566.6	2555.0	2568.9	2571.3
7.5°	2548.0	2548.0	2541.0	2555.0	2557.3
10°	2522.4	2524.7	2522.4	2538.7	2541.0
12.5°	2489.8	2494.5	2496.8	2513.1	2515.4
15°	2450.3	2457.2	2461.9	2482.8	2487.5
17.5°	2406.0	2413.0	2424.7	2447.9	2452.6
20°	2352.5	2361.8	2375.8	2406.0	2413.0
22.5°	2294.3	2303.7	2326.9	2354.8	2366.5
25°	2226.9	2245.5	2268.8	2306.0	2313.0
27.5°	2159.4	2175.7	2205.9	2245.5	2254.8
30°	2080.3	2105.9	2143.1	2182.7	2192.0
32.5°	2003.5	2029.1	2073.3	2115.2	2126.8
35°	1924.4	1947.6	1994.2	2043.0	2057.0
37.5°	1833.6	1863.9	1915.1	1963.9	1977.9
40°	1738.2	1775.4	1833.6	1884.8	1901.1
42.5°	1647.5	1687.0	1745.2	1801.0	1819.7
45°	1552.1	1589.3	1659.1	1721.9	1735.9
47.5°	1454.3	1496.2	1570.7	1633.5	1656.8
50°	1356.6	1400.8	1479.9	1545.1	1559.0
52.5°	1258.9	1305.4	1389.2	1459.0	1466.0
55°	1156.5	1207.7	1296.1	1363.6	1377.5
57.5°	1063.4	1107.6	1203.0	1272.8	1289.1
60°	961.0	1009.9	1112.3	1177.4	1198.4
62.5°	863.3	914.5	1021.5	1086.7	1105.3
65°	760.9	819.1	923.8	1000.6	1019.2
67.5°	672.5	728.3	840.0	914.5	933.1
70°	570.1	632.9	751.6	828.4	847.0
72.5°	481.7	546.8	665.5	740.0	767.9
75°	386.3	460.7	579.4	658.5	677.1
77.5°	293.2	379.3	500.3	560.8	560.8
80°	209.4	300.2	411.9	439.8	444.4
82.5°	137.3	225.7	304.8	302.5	302.5
85°	79.1	146.6	181.5	176.8	176.8
87.5°	30.3	60.5	65.2	65.2	62.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)