

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: P276540

Luminaire Tested: **24CZ2-70HE-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276540  
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-5500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7288.0 lumens  
Efficiency: N/A  
Efficacy: 132.2 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

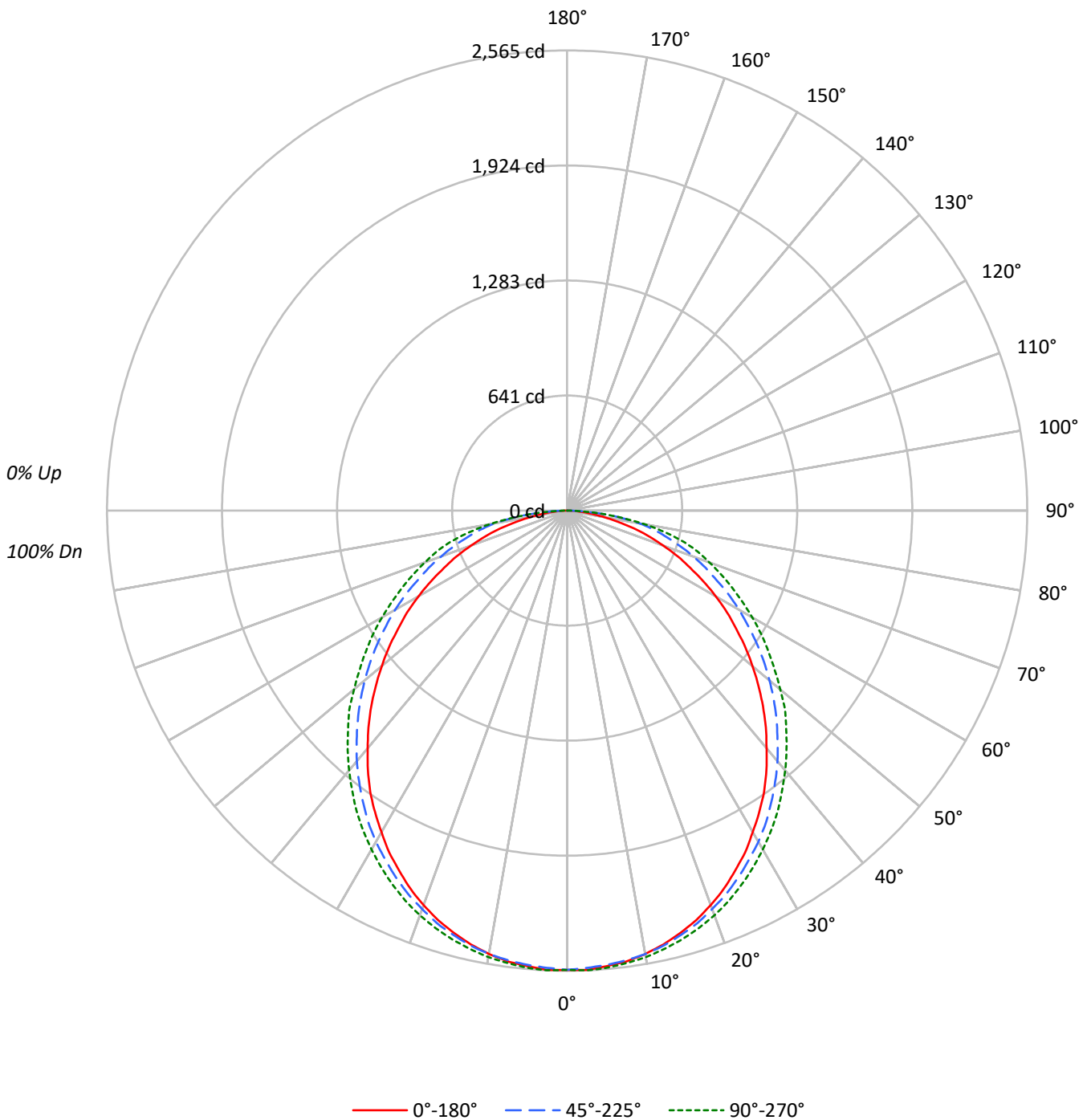
Input Watts (W): 55.149  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3445	3445	3445
5°	3442	3433	3455
10°	3428	3428	3454
15°	3395	3412	3447
20°	3351	3384	3437
25°	3289	3351	3416
30°	3215	3312	3388
35°	3144	3259	3361
40°	3037	3204	3322
45°	2938	3141	3286
50°	2825	3082	3247
55°	2699	3025	3215
60°	2573	2978	3208
65°	2410	2926	3228
70°	2231	2941	3315
75°	1998	2996	3502
80°	1614	3175	3426
85°	1215	2788	2716



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	242.4	3.3
10°-20°	692.6	9.5
20°-30°	1041.1	14.3
30°-40°	1240.1	17.0
40°-50°	1269.2	17.4
50°-60°	1142.7	15.7
60°-70°	897.4	12.3
70°-80°	582.4	8.0
80°-90°	180.1	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°	1976.1	27.1
0°-40°	3216.2	44.1
0°-60°	5628.1	77.2
0°-90°	7288.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7288.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2560	2560	2560	2560	2560	
5°	2549	2553	2542	2556	2558	242
15°	2438	2445	2449	2470	2475	687
25°	2215	2234	2257	2294	2301	1021
35°	1914	1938	1984	2032	2046	1194
45°	1544	1581	1650	1713	1727	1190
55°	1150	1201	1289	1356	1370	1031
65°	757	815	919	995	1014	754
75°	384	458	576	655	674	407
85°	79	146	181	176	176	95
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2560.3	2560.3	2560.3	2560.3	2560.3
2.5°	2562.6	2562.6	2551.1	2562.6	2564.9
5°	2548.7	2553.4	2541.8	2555.7	2558.0
7.5°	2534.8	2534.8	2527.9	2541.8	2544.1
10°	2509.4	2511.7	2509.4	2525.6	2527.9
12.5°	2477.0	2481.6	2483.9	2500.1	2502.4
15°	2437.6	2444.6	2449.2	2470.0	2474.7
17.5°	2393.6	2400.6	2412.2	2435.3	2439.9
20°	2340.4	2349.7	2363.5	2393.6	2400.6
22.5°	2282.5	2291.8	2314.9	2342.7	2354.3
25°	2215.4	2233.9	2257.1	2294.1	2301.0
27.5°	2148.3	2164.5	2194.6	2233.9	2243.2
30°	2069.5	2095.0	2132.0	2171.4	2180.7
32.5°	1993.2	2018.6	2062.6	2104.3	2115.8
35°	1914.4	1937.6	1983.9	2032.5	2046.4
37.5°	1824.2	1854.3	1905.2	1953.8	1967.7
40°	1729.3	1766.3	1824.2	1875.1	1891.3
42.5°	1639.0	1678.3	1736.2	1791.8	1810.3
45°	1544.1	1581.1	1650.5	1713.0	1726.9
47.5°	1446.8	1488.5	1562.6	1625.1	1648.2
50°	1349.6	1393.6	1472.3	1537.1	1551.0
52.5°	1252.4	1298.7	1382.0	1451.5	1458.4
55°	1150.5	1201.4	1289.4	1356.5	1370.4
57.5°	1057.9	1101.9	1196.8	1266.3	1282.5
60°	956.1	1004.7	1106.5	1171.4	1192.2
62.5°	858.8	909.8	1016.3	1081.1	1099.6
65°	757.0	814.9	919.0	995.4	1013.9
67.5°	669.0	724.6	835.7	909.8	928.3
70°	567.2	629.7	747.7	824.1	842.6
72.5°	479.2	544.0	662.1	736.1	763.9
75°	384.3	458.4	576.4	655.1	673.6
77.5°	291.7	377.3	497.7	557.9	557.9
80°	208.3	298.6	409.7	437.5	442.2
82.5°	136.6	224.5	303.3	300.9	300.9
85°	78.7	145.8	180.6	175.9	175.9
87.5°	30.1	60.2	64.8	64.8	62.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)