

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: P276357

Luminaire Tested: **24CZ2-75HE-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276357
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: 24CZ2-75HE-S-UNV-L83050-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7081.0 lumens
Efficiency: N/A
Efficacy: 121.5 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

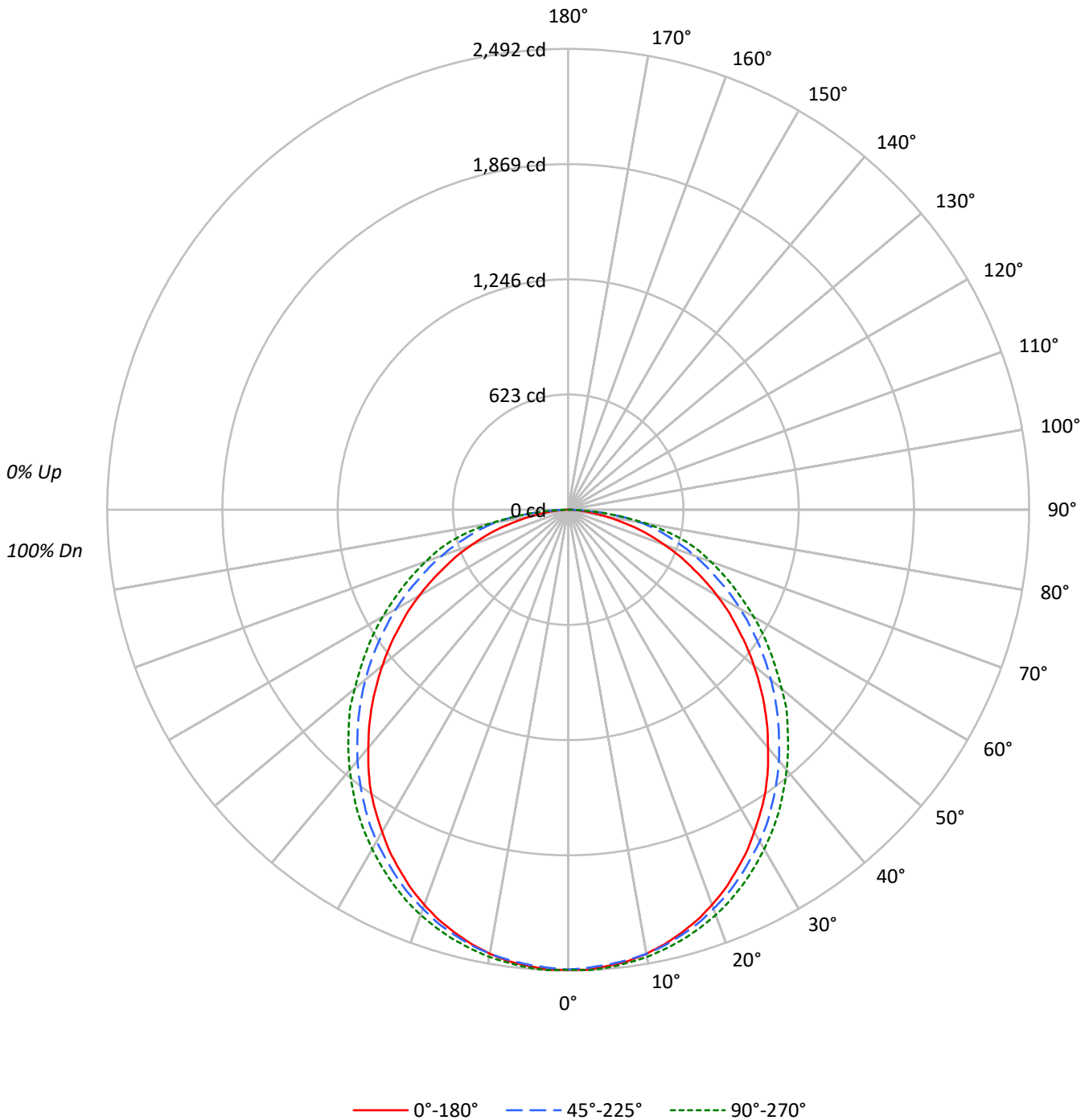
Input Watts (W): 58.287192
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3347	3347	3347
5°	3345	3336	3357
10°	3331	3331	3356
15°	3299	3315	3349
20°	3256	3288	3340
25°	3196	3256	3319
30°	3124	3218	3292
35°	3055	3166	3266
40°	2951	3113	3228
45°	2855	3052	3193
50°	2745	2994	3154
55°	2622	2939	3123
60°	2500	2893	3117
65°	2342	2843	3136
70°	2168	2858	3221
75°	1941	2911	3402
80°	1568	3085	3329
85°	1181	2708	2638



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.5	3.3
10°-20°	672.9	9.5
20°-30°	1011.5	14.3
30°-40°	1204.9	17.0
40°-50°	1233.2	17.4
50°-60°	1110.2	15.7
60°-70°	871.9	12.3
70°-80°	565.9	8.0
80°-90°	175.0	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°	1920.0	27.1
0°-40°	3124.9	44.1
0°-60°	5468.3	77.2
0°-90°	7081.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7081.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2488	2488	2488	2488	2488	
5°	2476	2481	2470	2483	2485	235
15°	2368	2375	2380	2400	2404	668
25°	2152	2170	2193	2229	2236	992
35°	1860	1883	1928	1975	1988	1160
45°	1500	1536	1604	1664	1678	1157
55°	1118	1167	1253	1318	1332	1002
65°	736	792	893	967	985	732
75°	373	445	560	636	654	395
85°	76	142	175	171	171	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2487.6	2487.6	2487.6	2487.6	2487.6
2.5°	2489.9	2489.9	2478.6	2489.9	2492.1
5°	2476.4	2480.9	2469.6	2483.1	2485.4
7.5°	2462.9	2462.9	2456.1	2469.6	2471.9
10°	2438.1	2440.4	2438.1	2453.9	2456.1
12.5°	2406.6	2411.1	2413.4	2429.1	2431.4
15°	2368.4	2375.1	2379.6	2399.9	2404.4
17.5°	2325.7	2332.4	2343.7	2366.1	2370.6
20°	2273.9	2282.9	2296.4	2325.7	2332.4
22.5°	2217.7	2226.7	2249.2	2276.2	2287.4
25°	2152.5	2170.5	2193.0	2228.9	2235.7
27.5°	2087.2	2103.0	2132.2	2170.5	2179.5
30°	2010.8	2035.5	2071.5	2109.7	2118.7
32.5°	1936.6	1961.3	2004.0	2044.5	2055.8
35°	1860.1	1882.6	1927.6	1974.8	1988.3
37.5°	1772.4	1801.6	1851.1	1898.3	1911.8
40°	1680.1	1716.1	1772.4	1821.8	1837.6
42.5°	1592.4	1630.7	1686.9	1740.9	1758.9
45°	1500.2	1536.2	1603.7	1664.4	1677.9
47.5°	1405.7	1446.2	1518.2	1578.9	1601.4
50°	1311.3	1354.0	1430.5	1493.5	1507.0
52.5°	1216.8	1261.8	1342.8	1410.2	1417.0
55°	1117.8	1167.3	1252.8	1318.0	1331.5
57.5°	1027.9	1070.6	1162.8	1230.3	1246.0
60°	928.9	976.1	1075.1	1138.1	1158.3
62.5°	834.4	883.9	987.4	1050.4	1068.4
65°	735.5	791.7	892.9	967.2	985.1
67.5°	650.0	704.0	812.0	883.9	901.9
70°	551.1	611.8	726.5	800.7	818.7
72.5°	465.6	528.6	643.3	715.2	742.2
75°	373.4	445.3	560.0	636.5	654.5
77.5°	283.4	366.6	483.6	542.1	542.1
80°	202.4	290.1	398.1	425.1	429.6
82.5°	132.7	218.2	294.6	292.4	292.4
85°	76.5	141.7	175.4	170.9	170.9
87.5°	29.2	58.5	63.0	63.0	60.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)