

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: P276359

Luminaire Tested: **24CZ2-75HE-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276359
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-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7867.0 lumens
Efficiency: N/A
Efficacy: 131.7 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

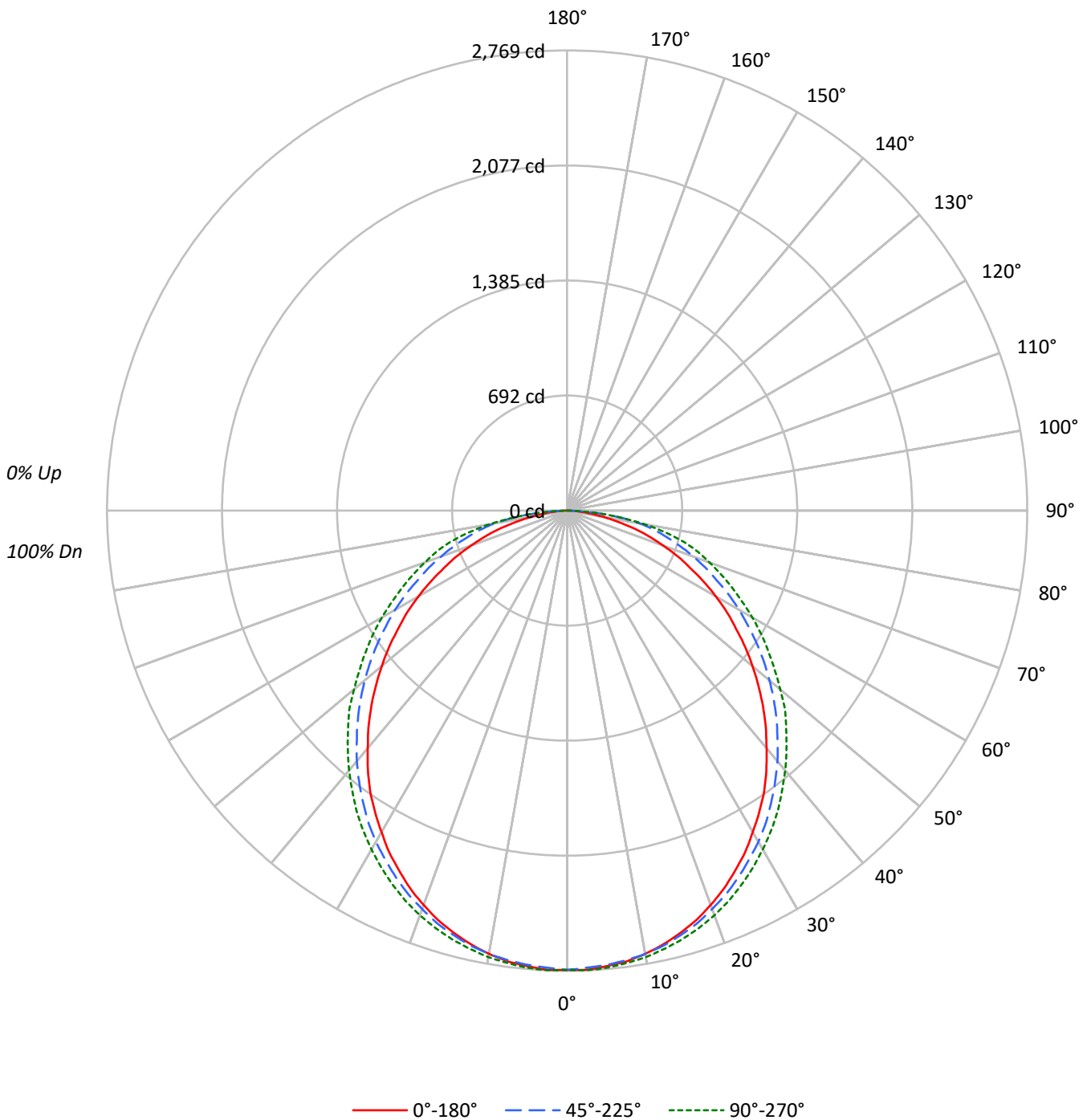
Input Watts (W): 59.747292
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3719	3719	3719
5°	3716	3706	3729
10°	3701	3701	3728
15°	3665	3683	3721
20°	3617	3653	3710
25°	3550	3617	3688
30°	3471	3576	3657
35°	3394	3517	3628
40°	3279	3459	3586
45°	3171	3390	3547
50°	3049	3327	3504
55°	2913	3265	3470
60°	2777	3214	3463
65°	2601	3158	3485
70°	2408	3175	3578
75°	2156	3235	3780
80°	1743	3427	3698
85°	1312	3009	2932



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.6	3.3
10°-20°	747.6	9.5
20°-30°	1123.8	14.3
30°-40°	1338.7	17.0
40°-50°	1370.1	17.4
50°-60°	1233.5	15.7
60°-70°	968.6	12.3
70°-80°	628.7	8.0
80°-90°	194.4	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°	2133.1	27.1
0°-40°	3471.7	44.1
0°-60°	6075.2	77.2
0°-90°	7867.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7867.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2764	2764	2764	2764	2764	
5°	2751	2756	2744	2759	2761	261
15°	2631	2639	2644	2666	2671	742
25°	2391	2411	2436	2476	2484	1102
35°	2066	2092	2142	2194	2209	1289
45°	1667	1707	1782	1849	1864	1285
55°	1242	1297	1392	1464	1479	1113
65°	817	880	992	1074	1094	813
75°	415	495	622	707	727	439
85°	85	157	195	190	190	103
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2763.7	2763.7	2763.7	2763.7	2763.7
2.5°	2766.2	2766.2	2753.7	2766.2	2768.7
5°	2751.2	2756.2	2743.7	2758.7	2761.2
7.5°	2736.2	2736.2	2728.7	2743.7	2746.2
10°	2708.8	2711.3	2708.8	2726.2	2728.7
12.5°	2673.8	2678.8	2681.3	2698.8	2701.3
15°	2631.3	2638.8	2643.8	2666.3	2671.3
17.5°	2583.8	2591.3	2603.8	2628.8	2633.8
20°	2526.3	2536.3	2551.3	2583.8	2591.3
22.5°	2463.9	2473.9	2498.9	2528.8	2541.3
25°	2391.4	2411.4	2436.4	2476.4	2483.9
27.5°	2318.9	2336.4	2368.9	2411.4	2421.4
30°	2234.0	2261.5	2301.4	2343.9	2353.9
32.5°	2151.5	2179.0	2226.5	2271.5	2283.9
35°	2066.5	2091.5	2141.5	2194.0	2209.0
37.5°	1969.1	2001.6	2056.6	2109.0	2124.0
40°	1866.6	1906.6	1969.1	2024.1	2041.6
42.5°	1769.2	1811.7	1874.1	1934.1	1954.1
45°	1666.7	1706.7	1781.7	1849.1	1864.1
47.5°	1561.8	1606.8	1686.7	1754.2	1779.2
50°	1456.8	1504.3	1589.3	1659.2	1674.2
52.5°	1351.9	1401.9	1491.8	1566.8	1574.3
55°	1241.9	1296.9	1391.9	1464.3	1479.3
57.5°	1142.0	1189.5	1291.9	1366.9	1384.4
60°	1032.0	1084.5	1194.5	1264.4	1286.9
62.5°	927.1	982.0	1097.0	1167.0	1187.0
65°	817.1	879.6	992.0	1074.5	1094.5
67.5°	722.2	782.1	902.1	982.0	1002.0
70°	612.2	679.7	807.1	889.6	909.6
72.5°	517.3	587.2	714.7	794.6	824.6
75°	414.8	494.8	622.2	707.2	727.2
77.5°	314.9	407.3	537.3	602.2	602.2
80°	224.9	322.4	442.3	472.3	477.3
82.5°	147.4	242.4	327.3	324.9	324.9
85°	85.0	157.4	194.9	189.9	189.9
87.5°	32.5	65.0	70.0	70.0	67.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)