

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: P276349

Luminaire Tested: **24CZ2-65HE-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276349
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: 24CZ2-65HE-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: 6822.0 lumens
Efficiency: N/A
Efficacy: 136.3 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

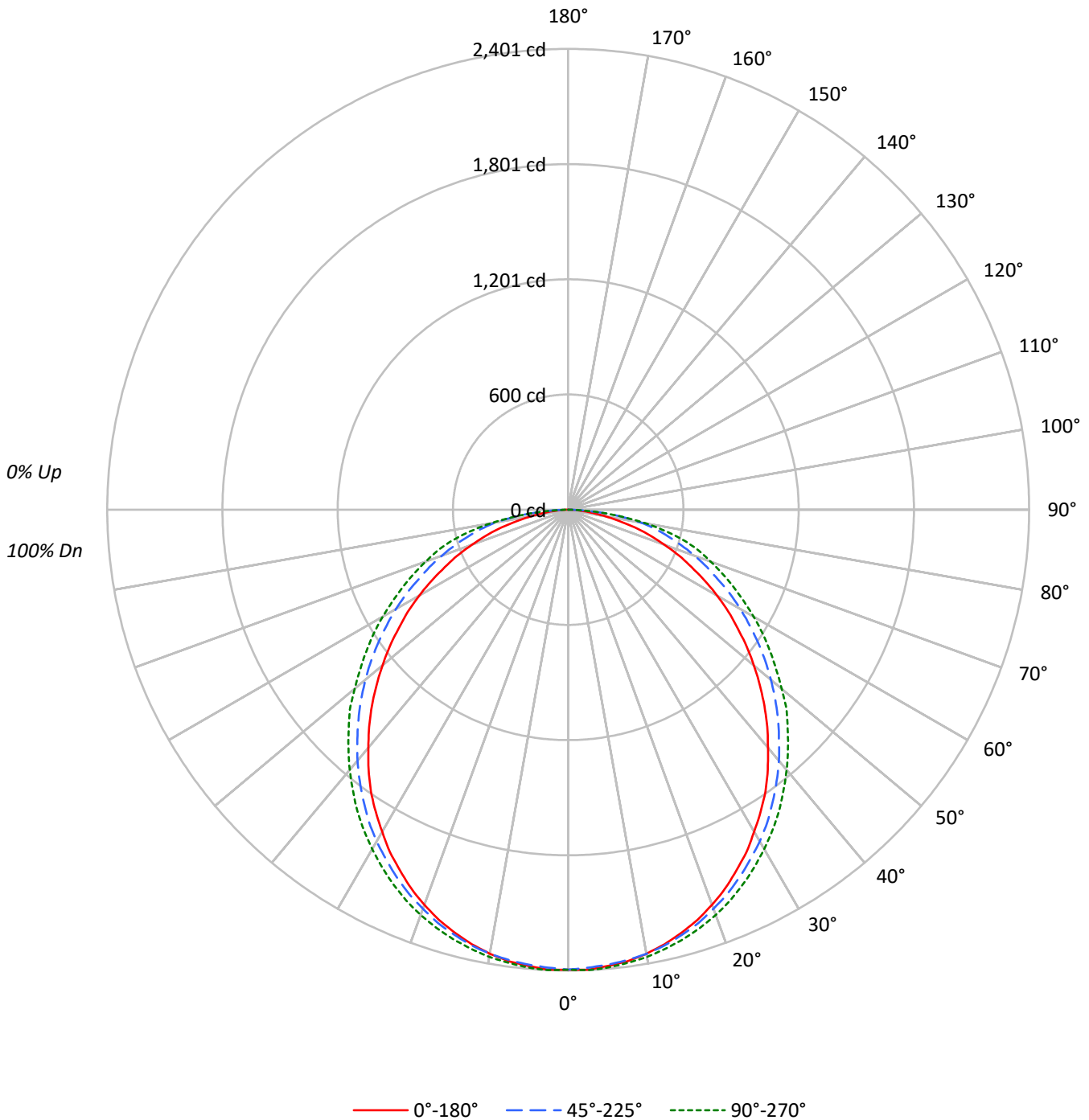
Input Watts (W): 50.043114
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3225	3225	3225
5°	3222	3214	3234
10°	3209	3209	3233
15°	3178	3193	3227
20°	3137	3168	3217
25°	3079	3136	3198
30°	3010	3101	3171
35°	2943	3050	3146
40°	2843	2999	3110
45°	2750	2940	3076
50°	2644	2885	3039
55°	2526	2831	3009
60°	2408	2787	3003
65°	2256	2739	3022
70°	2089	2753	3103
75°	1870	2805	3278
80°	1511	2971	3207
85°	1138	2609	2543



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.9	3.3
10°-20°	648.3	9.5
20°-30°	974.5	14.3
30°-40°	1160.8	17.0
40°-50°	1188.1	17.4
50°-60°	1069.6	15.7
60°-70°	840.0	12.3
70°-80°	545.2	8.0
80°-90°	168.6	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°	1849.7	27.1
0°-40°	3010.6	44.1
0°-60°	5268.2	77.2
0°-90°	6822.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6822.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2397	2397	2397	2397	2397	
5°	2386	2390	2379	2392	2394	227
15°	2282	2288	2293	2312	2316	643
25°	2074	2091	2113	2147	2154	955
35°	1792	1814	1857	1903	1916	1118
45°	1445	1480	1545	1604	1616	1114
55°	1077	1125	1207	1270	1283	965
65°	709	763	860	932	949	705
75°	360	429	540	613	631	381
85°	74	136	169	165	165	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2396.6	2396.6	2396.6	2396.6	2396.6
2.5°	2398.8	2398.8	2387.9	2398.8	2400.9
5°	2385.8	2390.1	2379.3	2392.3	2394.4
7.5°	2372.8	2372.8	2366.3	2379.3	2381.4
10°	2348.9	2351.1	2348.9	2364.1	2366.3
12.5°	2318.6	2322.9	2325.1	2340.3	2342.4
15°	2281.8	2288.3	2292.6	2312.1	2316.4
17.5°	2240.6	2247.1	2257.9	2279.6	2283.9
20°	2190.8	2199.4	2212.4	2240.6	2247.1
22.5°	2136.6	2145.3	2166.9	2192.9	2203.8
25°	2073.7	2091.1	2112.7	2147.4	2153.9
27.5°	2010.9	2026.1	2054.2	2091.1	2099.7
30°	1937.2	1961.1	1995.7	2032.6	2041.2
32.5°	1865.7	1889.6	1930.7	1969.7	1980.6
35°	1792.0	1813.7	1857.1	1902.6	1915.6
37.5°	1707.5	1735.7	1783.4	1828.9	1841.9
40°	1618.7	1653.4	1707.5	1755.2	1770.4
42.5°	1534.2	1571.0	1625.2	1677.2	1694.5
45°	1445.3	1480.0	1545.0	1603.5	1616.5
47.5°	1354.3	1393.3	1462.7	1521.2	1542.8
50°	1263.3	1304.5	1378.2	1438.8	1451.8
52.5°	1172.3	1215.6	1293.7	1358.7	1365.2
55°	1077.0	1124.6	1207.0	1269.8	1282.8
57.5°	990.3	1031.5	1120.3	1185.3	1200.5
60°	894.9	940.4	1035.8	1096.5	1116.0
62.5°	803.9	851.6	951.3	1012.0	1029.3
65°	708.6	762.8	860.3	931.8	949.1
67.5°	626.2	678.2	782.3	851.6	868.9
70°	530.9	589.4	699.9	771.4	788.8
72.5°	448.6	509.2	619.7	689.1	715.1
75°	359.7	429.1	539.6	613.2	630.6
77.5°	273.0	353.2	465.9	522.2	522.2
80°	195.0	279.5	383.5	409.5	413.9
82.5°	127.8	210.2	283.9	281.7	281.7
85°	73.7	136.5	169.0	164.7	164.7
87.5°	28.2	56.3	60.7	60.7	58.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)