

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: P276541

Luminaire Tested: **24CZ2-70HE-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276541
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-5700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7306.8 lumens
Efficiency: N/A
Efficacy: 132.5 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

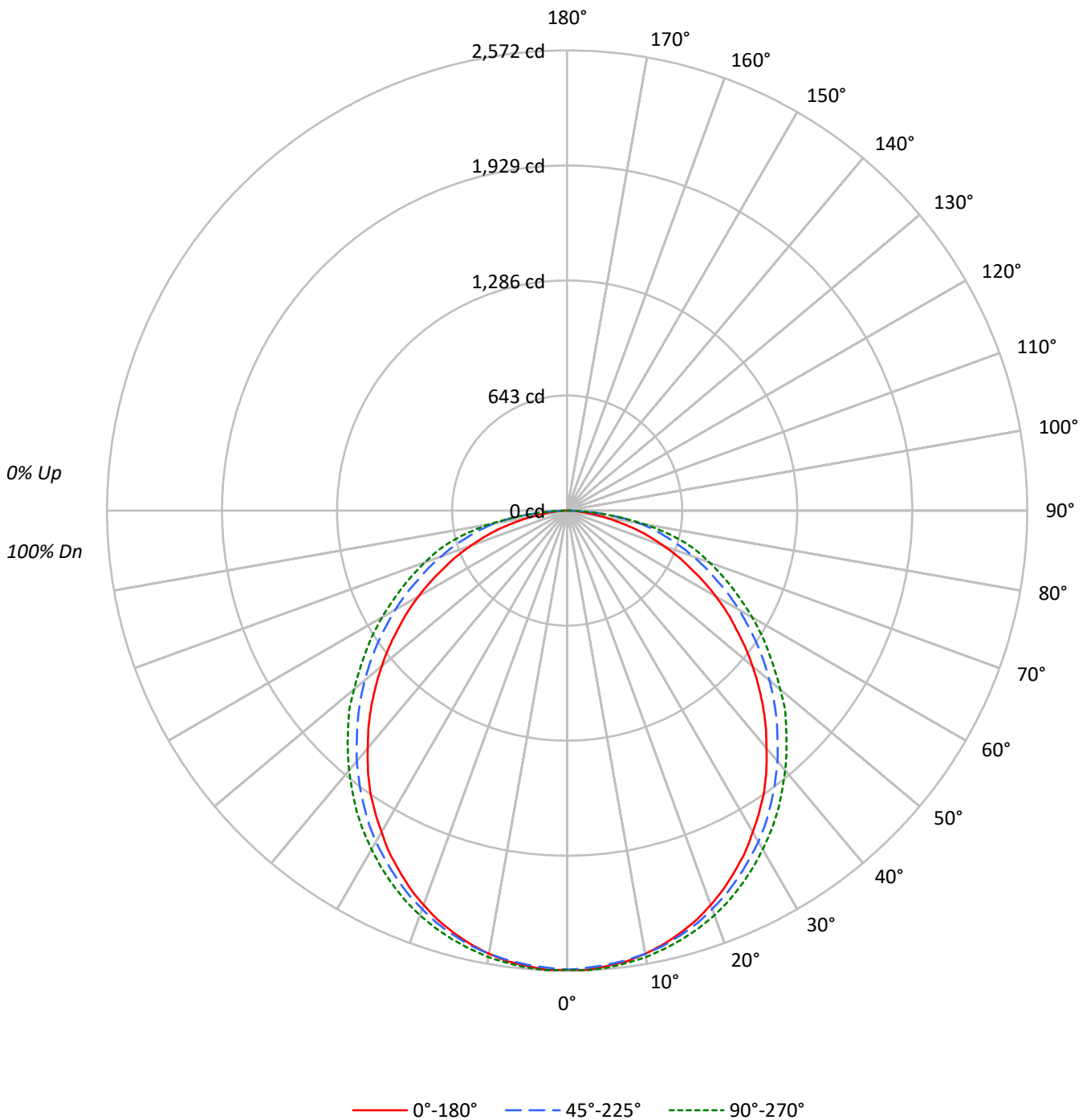
Input Watts (W): 55.149
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3454	3454	3454
5°	3451	3442	3464
10°	3437	3437	3463
15°	3404	3420	3456
20°	3360	3393	3446
25°	3297	3359	3425
30°	3224	3321	3397
35°	3153	3267	3370
40°	3045	3212	3331
45°	2946	3149	3295
50°	2832	3090	3255
55°	2706	3033	3223
60°	2579	2985	3217
65°	2416	2933	3237
70°	2237	2949	3323
75°	2003	3004	3511
80°	1619	3183	3435
85°	1218	2794	2723



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.0	3.3
10°-20°	694.4	9.5
20°-30°	1043.8	14.3
30°-40°	1243.3	17.0
40°-50°	1272.5	17.4
50°-60°	1145.6	15.7
60°-70°	899.7	12.3
70°-80°	583.9	8.0
80°-90°	180.6	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°	1981.2	27.1
0°-40°	3224.5	44.1
0°-60°	5642.7	77.2
0°-90°	7306.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7306.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2567	2567	2567	2567	2567	
5°	2555	2560	2548	2562	2565	243
15°	2444	2451	2456	2476	2481	689
25°	2221	2240	2263	2300	2307	1023
35°	1919	1943	1989	2038	2052	1197
45°	1548	1585	1655	1718	1731	1194
55°	1154	1205	1293	1360	1374	1034
65°	759	817	921	998	1017	755
75°	385	460	578	657	675	408
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°	2566.9	2566.9	2566.9	2566.9	2566.9
2.5°	2569.3	2569.3	2557.7	2569.3	2571.6
5°	2555.3	2560.0	2548.4	2562.3	2564.6
7.5°	2541.4	2541.4	2534.5	2548.4	2550.7
10°	2515.9	2518.2	2515.9	2532.1	2534.5
12.5°	2483.4	2488.0	2490.4	2506.6	2508.9
15°	2443.9	2450.9	2455.5	2476.4	2481.1
17.5°	2399.8	2406.8	2418.4	2441.6	2446.3
20°	2346.5	2355.7	2369.7	2399.8	2406.8
22.5°	2288.4	2297.7	2320.9	2348.8	2360.4
25°	2221.1	2239.7	2262.9	2300.0	2307.0
27.5°	2153.8	2170.1	2200.2	2239.7	2249.0
30°	2074.9	2100.4	2137.6	2177.0	2186.3
32.5°	1998.3	2023.8	2067.9	2109.7	2121.3
35°	1919.4	1942.6	1989.0	2037.8	2051.7
37.5°	1828.9	1859.1	1910.1	1958.9	1972.8
40°	1733.7	1770.9	1828.9	1880.0	1896.2
42.5°	1643.2	1682.7	1740.7	1796.4	1815.0
45°	1548.1	1585.2	1654.8	1717.5	1731.4
47.5°	1450.6	1492.4	1566.6	1629.3	1652.5
50°	1353.1	1397.2	1476.1	1541.1	1555.0
52.5°	1255.6	1302.0	1385.6	1455.2	1462.2
55°	1153.5	1204.6	1292.8	1360.1	1374.0
57.5°	1060.7	1104.8	1199.9	1269.5	1285.8
60°	958.5	1007.3	1109.4	1174.4	1195.3
62.5°	861.1	912.1	1018.9	1083.9	1102.4
65°	758.9	817.0	921.4	998.0	1016.6
67.5°	670.7	726.5	837.9	912.1	930.7
70°	568.6	631.3	749.7	826.2	844.8
72.5°	480.4	545.4	663.8	738.1	765.9
75°	385.3	459.5	577.9	656.8	675.4
77.5°	292.4	378.3	499.0	559.3	559.3
80°	208.9	299.4	410.8	438.7	443.3
82.5°	136.9	225.1	304.0	301.7	301.7
85°	78.9	146.2	181.0	176.4	176.4
87.5°	30.2	60.3	65.0	65.0	62.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)