

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: P276539

Luminaire Tested: **24CZ2-70HE-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276539
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-5000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7216.4 lumens
Efficiency: N/A
Efficacy: 131.3 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

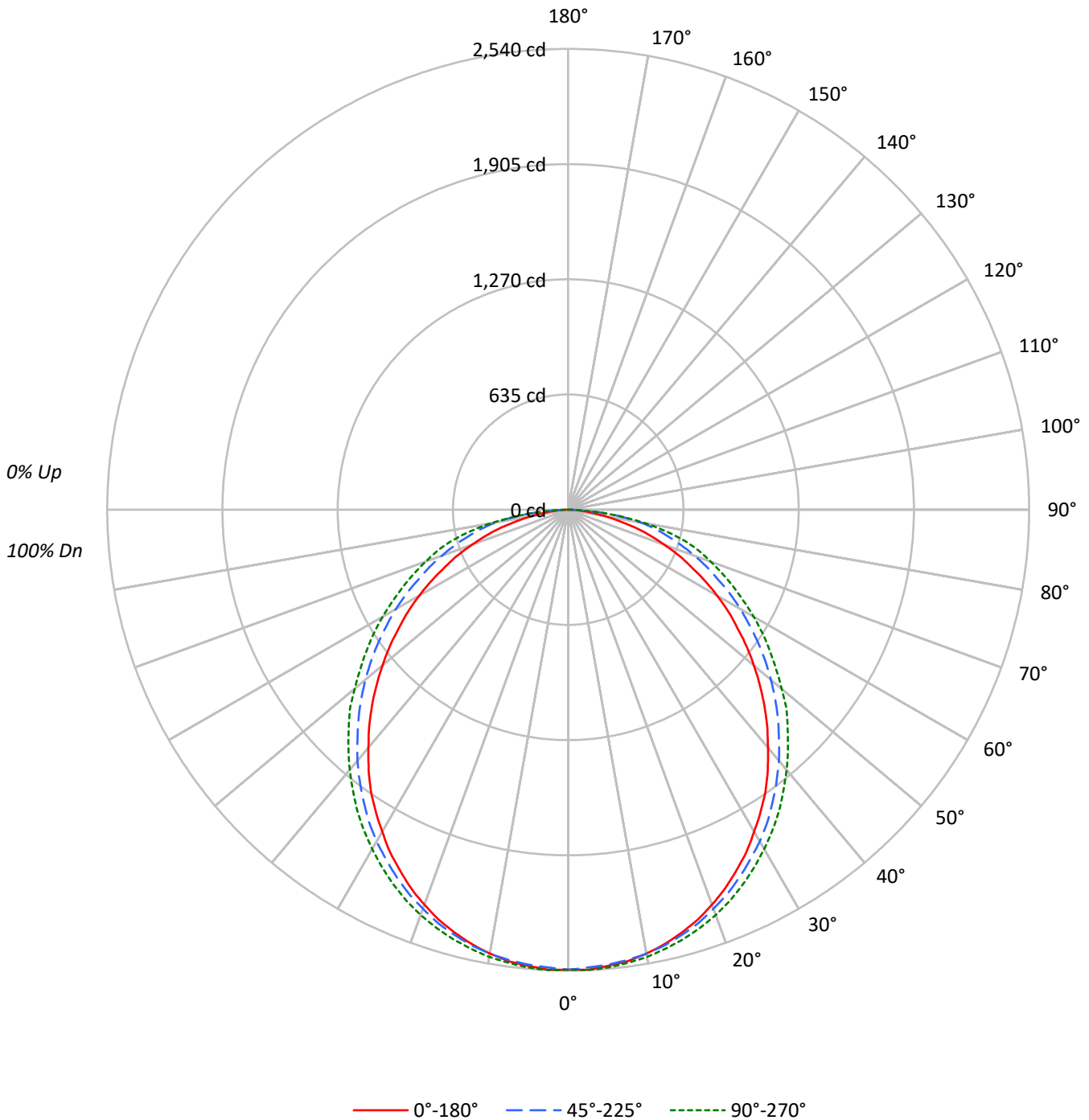
Input Watts (W): 54.963
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3411	3411	3411
5°	3409	3399	3421
10°	3395	3395	3420
15°	3362	3378	3413
20°	3318	3351	3403
25°	3257	3318	3382
30°	3184	3280	3355
35°	3114	3227	3328
40°	3008	3172	3289
45°	2909	3110	3254
50°	2797	3051	3215
55°	2672	2995	3183
60°	2548	2949	3177
65°	2386	2897	3196
70°	2209	2913	3282
75°	1978	2967	3467
80°	1598	3144	3392
85°	1203	2760	2689



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.0	3.3
10°-20°	685.8	9.5
20°-30°	1030.9	14.3
30°-40°	1227.9	17.0
40°-50°	1256.7	17.4
50°-60°	1131.4	15.7
60°-70°	888.6	12.3
70°-80°	576.7	8.0
80°-90°	178.4	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°	1956.7	27.1
0°-40°	3184.6	44.1
0°-60°	5572.8	77.2
0°-90°	7216.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7216.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2535	2535	2535	2535	2535	
5°	2524	2528	2517	2531	2533	240
15°	2414	2421	2425	2446	2450	681
25°	2194	2212	2235	2272	2278	1011
35°	1896	1919	1964	2012	2026	1183
45°	1529	1566	1634	1696	1710	1179
55°	1139	1190	1277	1343	1357	1021
65°	750	807	910	986	1004	746
75°	380	454	571	649	667	403
85°	78	144	179	174	174	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2535.2	2535.2	2535.2	2535.2	2535.2
2.5°	2537.5	2537.5	2526.0	2537.5	2539.8
5°	2523.7	2528.3	2516.8	2530.6	2532.9
7.5°	2510.0	2510.0	2503.1	2516.8	2519.1
10°	2484.7	2487.0	2484.7	2500.8	2503.1
12.5°	2452.6	2457.2	2459.5	2475.6	2477.9
15°	2413.7	2420.6	2425.1	2445.8	2450.4
17.5°	2370.1	2377.0	2388.5	2411.4	2416.0
20°	2317.4	2326.6	2340.3	2370.1	2377.0
22.5°	2260.1	2269.3	2292.2	2319.7	2331.2
25°	2193.6	2212.0	2234.9	2271.6	2278.4
27.5°	2127.2	2143.2	2173.0	2212.0	2221.1
30°	2049.2	2074.4	2111.1	2150.1	2159.2
32.5°	1973.6	1998.8	2042.3	2083.6	2095.1
35°	1895.6	1918.6	1964.4	2012.5	2026.3
37.5°	1806.2	1836.0	1886.5	1934.6	1948.4
40°	1712.3	1748.9	1806.2	1856.7	1872.7
42.5°	1622.9	1661.8	1719.1	1774.2	1792.5
45°	1528.9	1565.6	1634.3	1696.2	1710.0
47.5°	1432.6	1473.9	1547.2	1609.1	1632.0
50°	1336.3	1379.9	1457.8	1522.0	1535.8
52.5°	1240.1	1285.9	1368.4	1437.2	1444.1
55°	1139.2	1189.6	1276.8	1343.2	1357.0
57.5°	1047.5	1091.1	1185.1	1253.8	1269.9
60°	946.7	994.8	1095.7	1159.9	1180.5
62.5°	850.4	900.8	1006.3	1070.5	1088.8
65°	749.5	806.9	910.0	985.6	1004.0
67.5°	662.4	717.5	827.5	900.8	919.2
70°	561.6	623.5	740.4	816.0	834.4
72.5°	474.5	538.7	655.6	728.9	756.4
75°	380.5	453.9	570.8	648.7	667.0
77.5°	288.8	373.6	492.8	552.4	552.4
80°	206.3	295.7	405.7	433.2	437.8
82.5°	135.2	222.3	300.3	298.0	298.0
85°	77.9	144.4	178.8	174.2	174.2
87.5°	29.8	59.6	64.2	64.2	61.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)