

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: P276352

Luminaire Tested: **24CZ2-70HE-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276352
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-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: 6623.0 lumens
Efficiency: N/A
Efficacy: 123.7 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

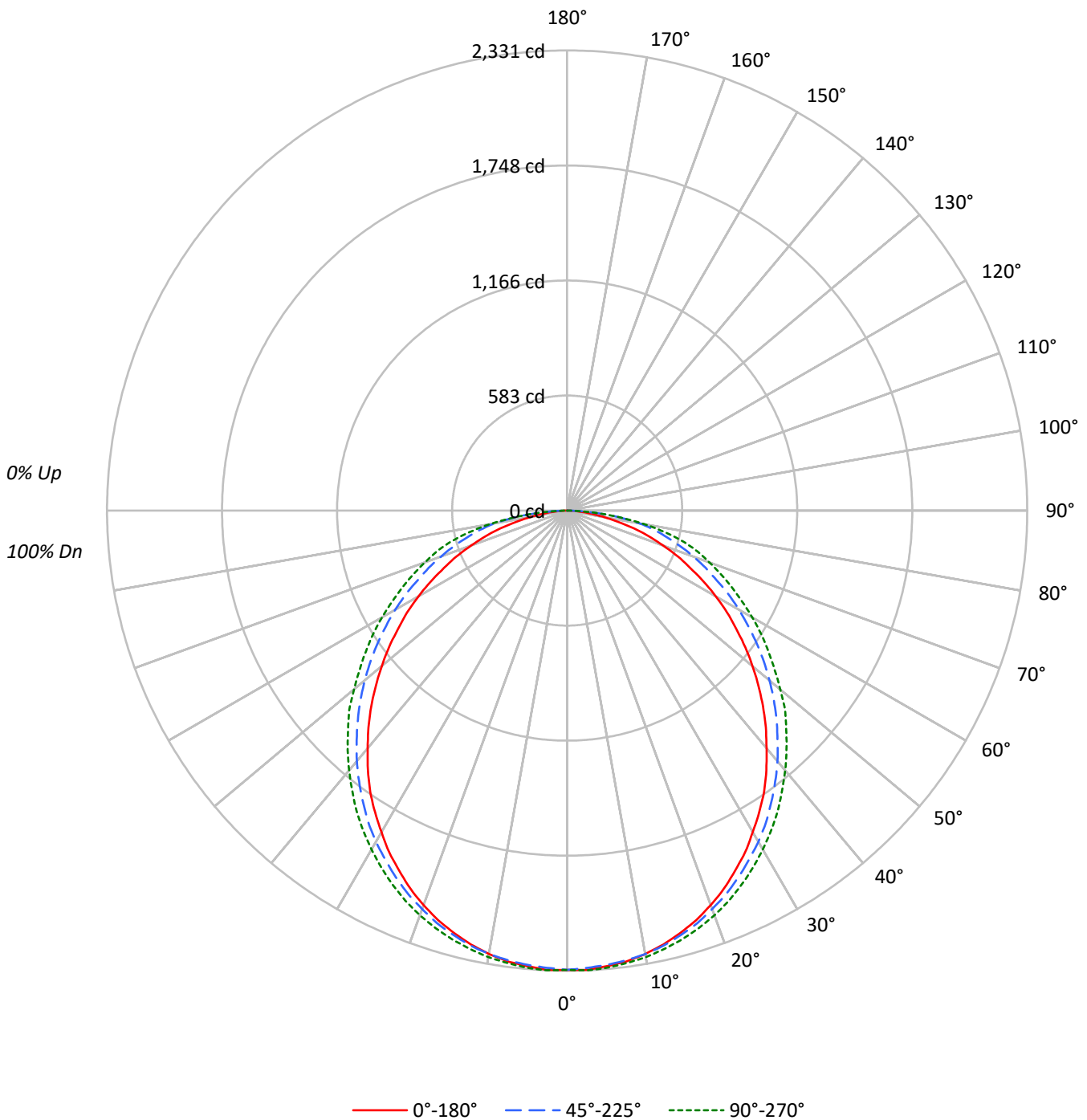
Input Watts (W): 53.553678
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3131	3131	3131
5°	3128	3120	3140
10°	3116	3116	3139
15°	3086	3100	3133
20°	3045	3075	3124
25°	2989	3045	3104
30°	2922	3010	3079
35°	2858	2961	3055
40°	2760	2912	3019
45°	2670	2854	2986
50°	2567	2801	2950
55°	2453	2749	2921
60°	2338	2706	2915
65°	2190	2659	2933
70°	2028	2673	3013
75°	1815	2723	3183
80°	1467	2885	3113
85°	1104	2533	2468



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.3	3.3
10°-20°	629.4	9.5
20°-30°	946.1	14.3
30°-40°	1127.0	17.0
40°-50°	1153.4	17.4
50°-60°	1038.4	15.7
60°-70°	815.5	12.3
70°-80°	529.3	8.0
80°-90°	163.7	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°	1795.8	27.1
0°-40°	2922.8	44.1
0°-60°	5114.6	77.2
0°-90°	6623.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6623.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2327	2327	2327	2327	2327	
5°	2316	2320	2310	2322	2325	220
15°	2215	2222	2226	2245	2249	625
25°	2013	2030	2051	2085	2091	927
35°	1740	1761	1803	1847	1860	1085
45°	1403	1437	1500	1557	1569	1082
55°	1046	1092	1172	1233	1245	937
65°	688	740	835	905	921	685
75°	349	416	524	595	612	370
85°	72	132	164	160	160	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2326.7	2326.7	2326.7	2326.7	2326.7
2.5°	2328.8	2328.8	2318.3	2328.8	2330.9
5°	2316.2	2320.4	2309.9	2322.5	2324.6
7.5°	2303.6	2303.6	2297.3	2309.9	2312.0
10°	2280.4	2282.5	2280.4	2295.1	2297.3
12.5°	2251.0	2255.2	2257.3	2272.0	2274.1
15°	2215.2	2221.5	2225.7	2244.7	2248.9
17.5°	2175.2	2181.5	2192.1	2213.1	2217.3
20°	2126.9	2135.3	2147.9	2175.2	2181.5
22.5°	2074.3	2082.7	2103.7	2129.0	2139.5
25°	2013.3	2030.1	2051.1	2084.8	2091.1
27.5°	1952.2	1967.0	1994.3	2030.1	2038.5
30°	1880.7	1903.9	1937.5	1973.3	1981.7
32.5°	1811.3	1834.4	1874.4	1912.3	1922.8
35°	1739.8	1760.8	1802.9	1847.1	1859.7
37.5°	1657.7	1685.1	1731.4	1775.5	1788.2
40°	1571.5	1605.1	1657.7	1704.0	1718.7
42.5°	1489.4	1525.2	1577.8	1628.3	1645.1
45°	1403.2	1436.8	1499.9	1556.7	1569.4
47.5°	1314.8	1352.7	1420.0	1476.8	1497.8
50°	1226.5	1266.4	1338.0	1396.9	1409.5
52.5°	1138.1	1180.2	1255.9	1319.0	1325.3
55°	1045.5	1091.8	1171.8	1232.8	1245.4
57.5°	961.4	1001.4	1087.6	1150.7	1165.5
60°	868.8	913.0	1005.6	1064.5	1083.4
62.5°	780.5	826.8	923.5	982.4	999.3
65°	687.9	740.5	835.2	904.6	921.4
67.5°	608.0	658.5	759.4	826.8	843.6
70°	515.4	572.2	679.5	748.9	765.8
72.5°	435.5	494.4	601.7	669.0	694.2
75°	349.2	416.5	523.8	595.3	612.2
77.5°	265.1	342.9	452.3	507.0	507.0
80°	189.3	271.4	372.4	397.6	401.8
82.5°	124.1	204.1	275.6	273.5	273.5
85°	71.5	132.5	164.1	159.9	159.9
87.5°	27.3	54.7	58.9	58.9	56.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)