

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: P276536

Luminaire Tested: **24CZ2-70HE-S-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276536
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-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6845.7 lumens
Efficiency: N/A
Efficacy: 126.9 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

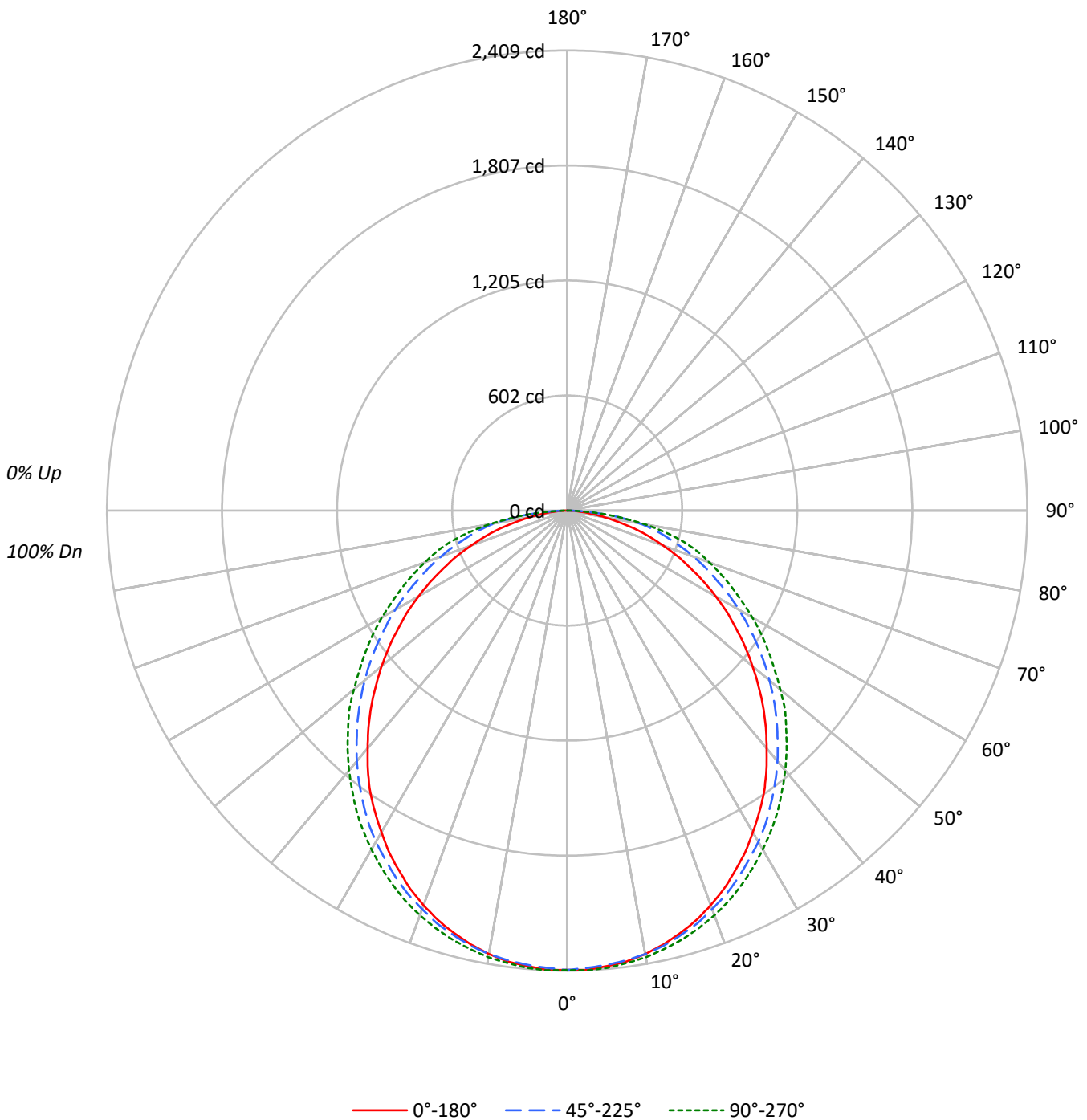
Input Watts (W): 53.94
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3236	3236	3236
5°	3233	3225	3245
10°	3220	3220	3244
15°	3189	3204	3238
20°	3148	3179	3229
25°	3089	3147	3209
30°	3020	3111	3182
35°	2954	3061	3157
40°	2853	3009	3120
45°	2760	2950	3087
50°	2654	2895	3050
55°	2535	2841	3020
60°	2416	2797	3013
65°	2264	2748	3032
70°	2096	2763	3114
75°	1877	2815	3290
80°	1516	2982	3218
85°	1141	2618	2552



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.7	3.3
10°-20°	650.6	9.5
20°-30°	977.9	14.3
30°-40°	1164.9	17.0
40°-50°	1192.2	17.4
50°-60°	1073.3	15.7
60°-70°	842.9	12.3
70°-80°	547.1	8.0
80°-90°	169.2	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°	1856.1	27.1
0°-40°	3021.0	44.1
0°-60°	5286.5	77.2
0°-90°	6845.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6845.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2405	2405	2405	2405	2405	
5°	2394	2398	2388	2401	2403	227
15°	2290	2296	2300	2320	2324	646
25°	2081	2098	2120	2155	2161	959
35°	1798	1820	1864	1909	1922	1122
45°	1450	1485	1550	1609	1622	1118
55°	1081	1128	1211	1274	1287	969
65°	711	765	863	935	952	708
75°	361	430	541	615	633	382
85°	74	137	170	165	165	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2404.9	2404.9	2404.9	2404.9	2404.9
2.5°	2407.1	2407.1	2396.2	2407.1	2409.3
5°	2394.0	2398.4	2387.5	2400.6	2402.7
7.5°	2381.0	2381.0	2374.5	2387.5	2389.7
10°	2357.1	2359.3	2357.1	2372.3	2374.5
12.5°	2326.6	2331.0	2333.2	2348.4	2350.6
15°	2289.7	2296.2	2300.5	2320.1	2324.5
17.5°	2248.4	2254.9	2265.8	2287.5	2291.8
20°	2198.3	2207.0	2220.1	2248.4	2254.9
22.5°	2144.0	2152.7	2174.4	2200.5	2211.4
25°	2080.9	2098.3	2120.1	2154.9	2161.4
27.5°	2017.9	2033.1	2061.4	2098.3	2107.0
30°	1943.9	1967.9	2002.6	2039.6	2048.3
32.5°	1872.2	1896.1	1937.4	1976.6	1987.4
35°	1798.3	1820.0	1863.5	1909.1	1922.2
37.5°	1713.4	1741.7	1789.6	1835.2	1848.3
40°	1624.3	1659.1	1713.4	1761.3	1776.5
42.5°	1539.5	1576.5	1630.8	1683.0	1700.4
45°	1450.3	1485.1	1550.4	1609.1	1622.1
47.5°	1359.0	1398.2	1467.7	1526.4	1548.2
50°	1267.7	1309.0	1382.9	1443.8	1456.9
52.5°	1176.4	1219.9	1298.1	1363.4	1369.9
55°	1080.7	1128.5	1211.2	1274.2	1287.3
57.5°	993.7	1035.0	1124.2	1189.4	1204.6
60°	898.0	943.7	1039.4	1100.3	1119.8
62.5°	806.7	854.6	954.6	1015.5	1032.9
65°	711.0	765.4	863.2	935.0	952.4
67.5°	628.4	680.6	785.0	854.6	871.9
70°	532.7	591.4	702.3	774.1	791.5
72.5°	450.1	511.0	621.9	691.5	717.6
75°	361.0	430.5	541.4	615.4	632.8
77.5°	274.0	354.4	467.5	524.0	524.0
80°	195.7	280.5	384.9	411.0	415.3
82.5°	128.3	210.9	284.9	282.7	282.7
85°	73.9	137.0	169.6	165.3	165.3
87.5°	28.3	56.5	60.9	60.9	58.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)