

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: P276685

Luminaire Tested: **24CZ2-75HE-S-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P276685
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: 24CZ2-75HE-S-UNV-L92765-W2A1-U-5700K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7063.3 lumens
Efficiency: N/A
Efficacy: 117.4 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

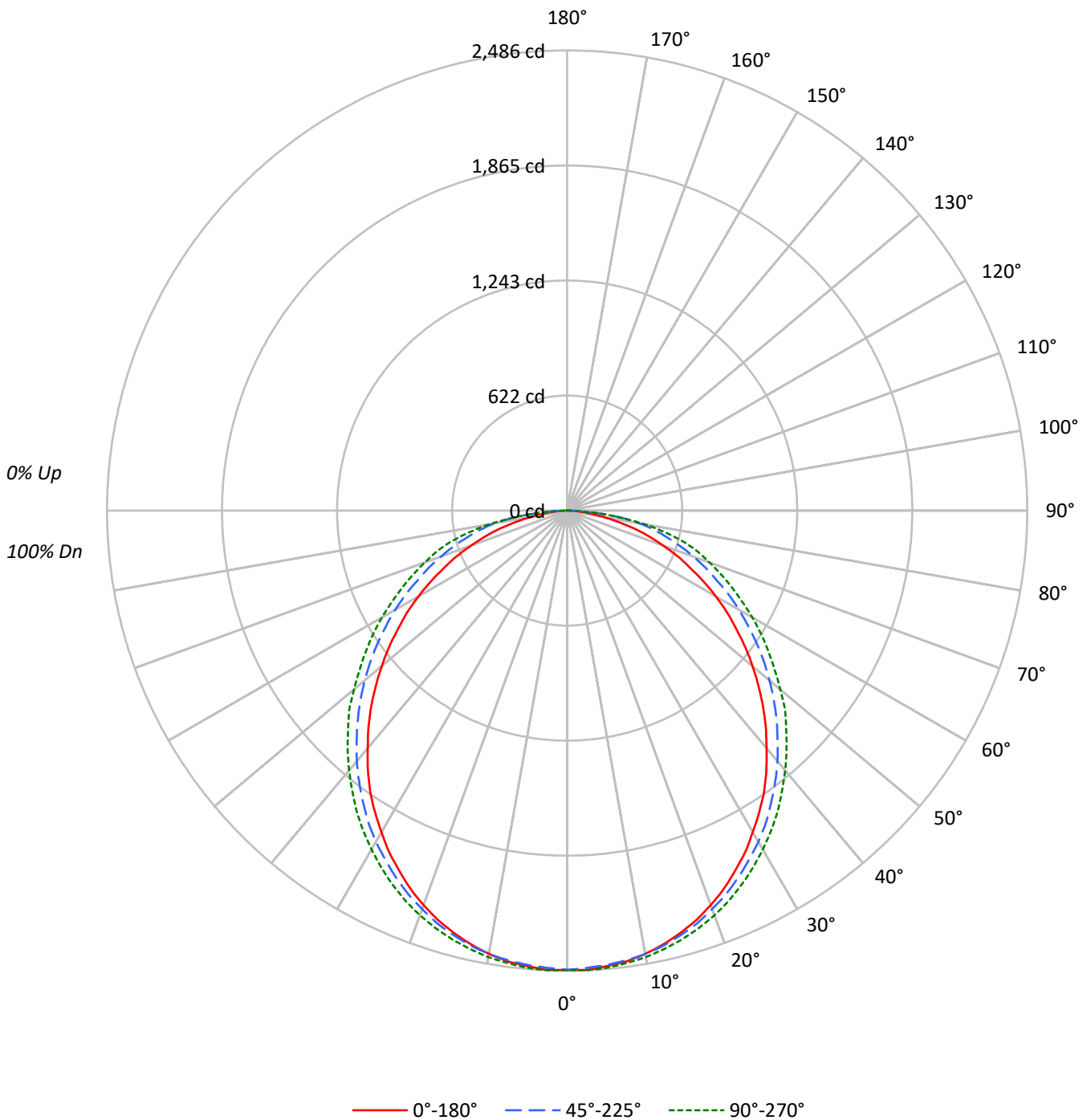
Input Watts (W): 60.171
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3339	3339	3339
5°	3336	3327	3348
10°	3323	3323	3347
15°	3291	3306	3341
20°	3248	3280	3331
25°	3188	3248	3311
30°	3116	3210	3283
35°	3048	3158	3258
40°	2944	3105	3220
45°	2848	3044	3185
50°	2738	2987	3147
55°	2616	2932	3116
60°	2493	2886	3109
65°	2336	2836	3129
70°	2162	2851	3213
75°	1936	2904	3394
80°	1564	3077	3320
85°	1178	2702	2632



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.9	3.3
10°-20°	671.2	9.5
20°-30°	1009.0	14.3
30°-40°	1201.9	17.0
40°-50°	1230.1	17.4
50°-60°	1107.4	15.7
60°-70°	869.7	12.3
70°-80°	564.4	8.0
80°-90°	174.6	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°	1915.2	27.1
0°-40°	3117.1	44.1
0°-60°	5454.6	77.2
0°-90°	7063.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7063.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2481	2481	2481	2481	2481	
5°	2470	2475	2463	2477	2479	235
15°	2362	2369	2374	2394	2398	666
25°	2147	2165	2188	2223	2230	989
35°	1855	1878	1923	1970	1983	1157
45°	1496	1532	1600	1660	1674	1154
55°	1115	1164	1250	1315	1328	1000
65°	734	790	891	965	983	730
75°	372	444	559	635	653	394
85°	76	141	175	170	170	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2481.4	2481.4	2481.4	2481.4	2481.4
2.5°	2483.6	2483.6	2472.4	2483.6	2485.9
5°	2470.2	2474.7	2463.4	2476.9	2479.1
7.5°	2456.7	2456.7	2450.0	2463.4	2465.7
10°	2432.0	2434.3	2432.0	2447.7	2450.0
12.5°	2400.6	2405.1	2407.4	2423.1	2425.3
15°	2362.5	2369.2	2373.7	2393.9	2398.4
17.5°	2319.9	2326.6	2337.8	2360.2	2364.7
20°	2268.3	2277.2	2290.7	2319.9	2326.6
22.5°	2212.2	2221.1	2243.6	2270.5	2281.7
25°	2147.1	2165.0	2187.5	2223.4	2230.1
27.5°	2082.0	2097.7	2126.9	2165.0	2174.0
30°	2005.8	2030.4	2066.3	2104.5	2113.4
32.5°	1931.7	1956.4	1999.0	2039.4	2050.6
35°	1855.4	1877.9	1922.7	1969.9	1983.3
37.5°	1767.9	1797.1	1846.5	1893.6	1907.0
40°	1675.9	1711.8	1767.9	1817.3	1833.0
42.5°	1588.4	1626.6	1682.7	1736.5	1754.5
45°	1496.5	1532.4	1599.7	1660.2	1673.7
47.5°	1402.2	1442.6	1514.4	1575.0	1597.4
50°	1308.0	1350.6	1426.9	1489.7	1503.2
52.5°	1213.8	1258.6	1339.4	1406.7	1413.5
55°	1115.1	1164.4	1249.7	1314.7	1328.2
57.5°	1025.3	1067.9	1159.9	1227.2	1242.9
60°	926.6	973.7	1072.4	1135.2	1155.4
62.5°	832.4	881.7	984.9	1047.7	1065.7
65°	733.6	789.7	890.7	964.7	982.7
67.5°	648.4	702.2	809.9	881.7	899.7
70°	549.7	610.3	724.7	798.7	816.7
72.5°	464.4	527.2	641.7	713.5	740.4
75°	372.4	444.2	558.6	634.9	652.9
77.5°	282.7	365.7	482.4	540.7	540.7
80°	201.9	289.4	397.1	424.0	428.5
82.5°	132.4	217.6	293.9	291.7	291.7
85°	76.3	141.3	175.0	170.5	170.5
87.5°	29.2	58.3	62.8	62.8	60.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)