

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: P276520

Luminaire Tested: **24CZ2-60HE-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276520
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: 24CZ2-60HE-S-UNV-L82765-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6091.2 lumens
Efficiency: N/A
Efficacy: 135.0 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

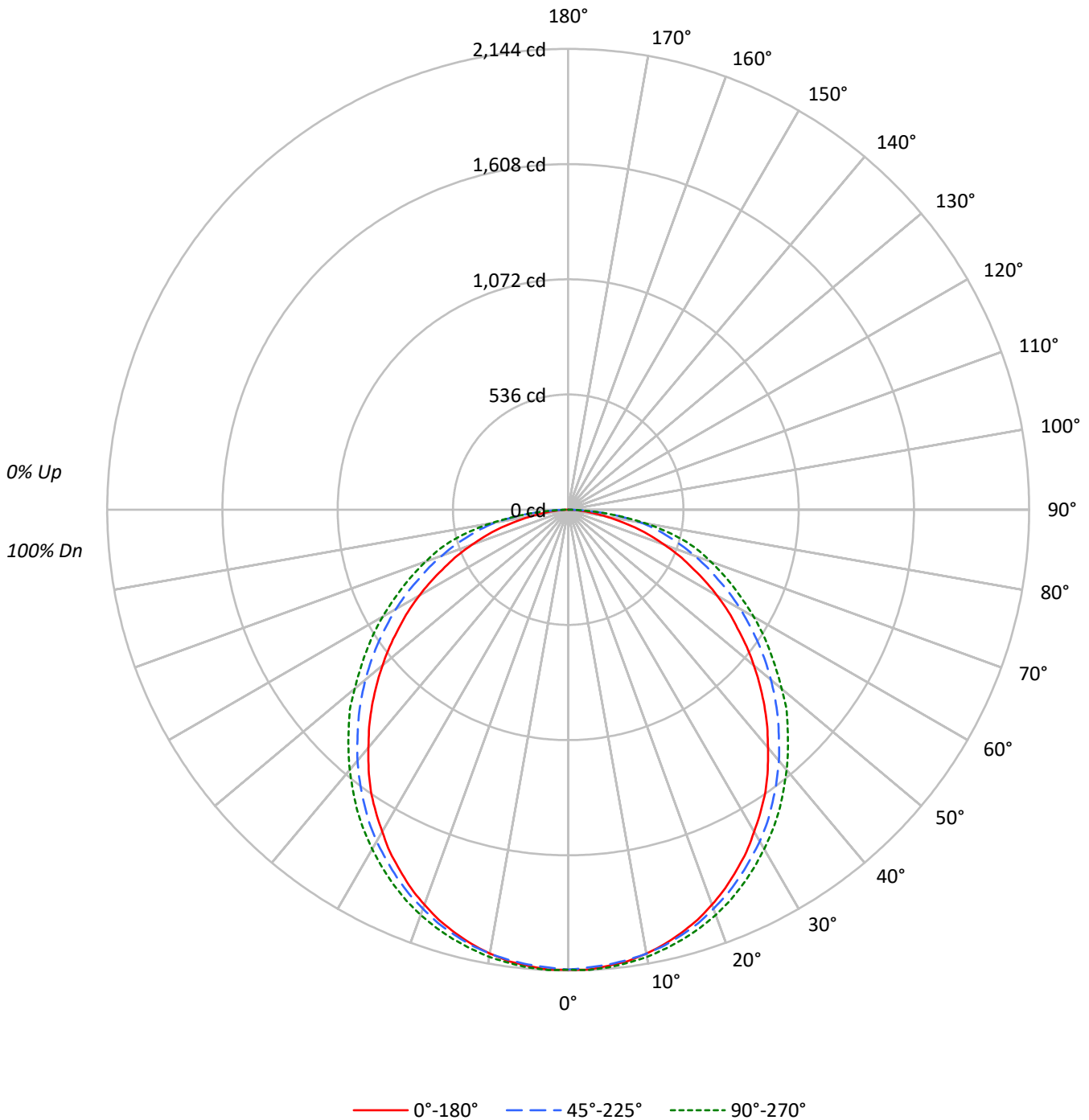
Input Watts (W): 45.105
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2879	2879	2879
5°	2877	2869	2888
10°	2865	2865	2887
15°	2838	2851	2881
20°	2801	2828	2873
25°	2749	2801	2855
30°	2687	2768	2832
35°	2628	2723	2809
40°	2539	2678	2776
45°	2456	2625	2747
50°	2361	2576	2713
55°	2256	2528	2687
60°	2150	2489	2681
65°	2014	2445	2698
70°	1865	2458	2771
75°	1670	2505	2927
80°	1349	2654	2863
85°	1016	2330	2269



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.6	3.3
10°-20°	578.9	9.5
20°-30°	870.1	14.3
30°-40°	1036.5	17.0
40°-50°	1060.8	17.4
50°-60°	955.0	15.7
60°-70°	750.0	12.3
70°-80°	486.8	8.0
80°-90°	150.5	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°	1651.6	27.1
0°-40°	2688.1	44.1
0°-60°	4703.9	77.2
0°-90°	6091.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6091.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2140	2140	2140	2140	2140	
5°	2130	2134	2124	2136	2138	202
15°	2037	2043	2047	2064	2068	574
25°	1852	1867	1886	1917	1923	853
35°	1600	1619	1658	1699	1710	998
45°	1290	1322	1380	1432	1443	995
55°	962	1004	1078	1134	1145	862
65°	633	681	768	832	847	630
75°	321	383	482	548	563	340
85°	66	122	151	147	147	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2139.9	2139.9	2139.9	2139.9	2139.9
2.5°	2141.8	2141.8	2132.1	2141.8	2143.7
5°	2130.2	2134.1	2124.4	2136.0	2137.9
7.5°	2118.6	2118.6	2112.8	2124.4	2126.3
10°	2097.3	2099.2	2097.3	2110.9	2112.8
12.5°	2070.2	2074.1	2076.0	2089.6	2091.5
15°	2037.3	2043.1	2047.0	2064.4	2068.3
17.5°	2000.6	2006.4	2016.1	2035.4	2039.3
20°	1956.1	1963.8	1975.4	2000.6	2006.4
22.5°	1907.7	1915.4	1934.8	1958.0	1967.7
25°	1851.6	1867.1	1886.4	1917.4	1923.2
27.5°	1795.5	1809.0	1834.2	1867.1	1874.8
30°	1729.7	1751.0	1781.9	1814.8	1822.6
32.5°	1665.9	1687.1	1723.9	1758.7	1768.4
35°	1600.1	1619.4	1658.1	1698.7	1710.4
37.5°	1524.6	1549.8	1592.3	1633.0	1644.6
40°	1445.3	1476.2	1524.6	1567.2	1580.7
42.5°	1369.8	1402.7	1451.1	1497.5	1513.0
45°	1290.5	1321.5	1379.5	1431.7	1443.4
47.5°	1209.2	1244.1	1306.0	1358.2	1377.6
50°	1128.0	1164.7	1230.5	1284.7	1296.3
52.5°	1046.7	1085.4	1155.1	1213.1	1218.9
55°	961.6	1004.2	1077.7	1133.8	1145.4
57.5°	884.2	921.0	1000.3	1058.3	1071.9
60°	799.1	839.7	924.8	979.0	996.4
62.5°	717.8	760.4	849.4	903.5	919.0
65°	632.7	681.0	768.1	832.0	847.4
67.5°	559.2	605.6	698.5	760.4	775.9
70°	474.0	526.3	624.9	688.8	704.3
72.5°	400.5	454.7	553.3	615.3	638.5
75°	321.2	383.1	481.8	547.5	563.0
77.5°	243.8	315.4	416.0	466.3	466.3
80°	174.1	249.6	342.5	365.7	369.5
82.5°	114.2	187.7	253.5	251.5	251.5
85°	65.8	121.9	150.9	147.0	147.0
87.5°	25.2	50.3	54.2	54.2	52.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)