

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: P276343

Luminaire Tested: **24CZ2-60HE-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276343
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-L83050-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: 5996.0 lumens
Efficiency: N/A
Efficacy: 135.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.27 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

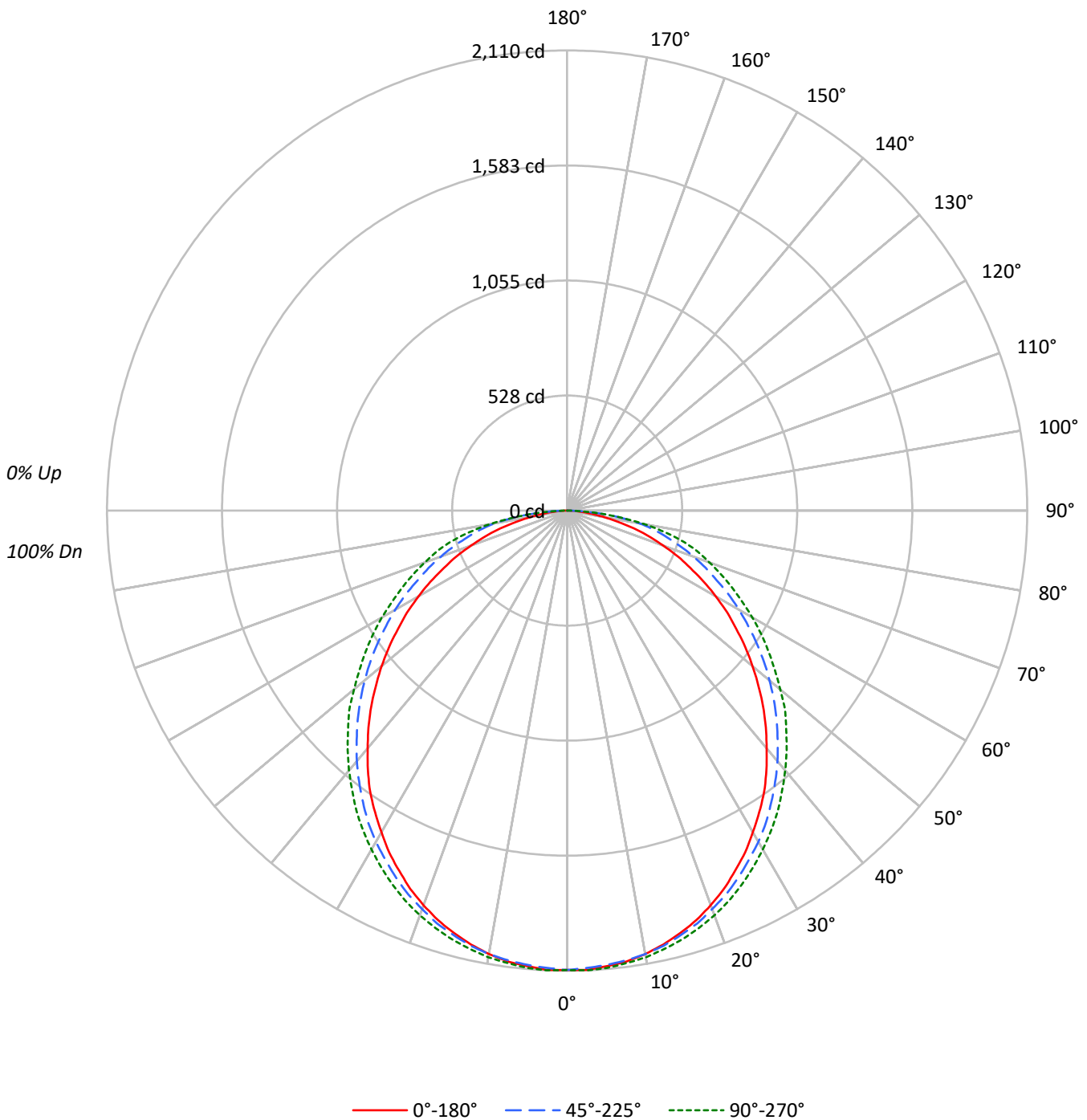
Input Watts (W): 44.268
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2834	2834	2834
5°	2832	2824	2842
10°	2821	2821	2842
15°	2794	2807	2836
20°	2757	2784	2828
25°	2706	2757	2810
30°	2645	2725	2787
35°	2587	2681	2765
40°	2499	2636	2733
45°	2417	2584	2704
50°	2324	2536	2671
55°	2221	2488	2645
60°	2117	2450	2639
65°	1983	2407	2656
70°	1836	2420	2727
75°	1644	2465	2881
80°	1328	2612	2819
85°	1000	2294	2234



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.4	3.3
10°-20°	569.8	9.5
20°-30°	856.5	14.3
30°-40°	1020.3	17.0
40°-50°	1044.2	17.4
50°-60°	940.1	15.7
60°-70°	738.3	12.3
70°-80°	479.2	8.0
80°-90°	148.2	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°	1625.8	27.1
0°-40°	2646.1	44.1
0°-60°	4630.4	77.2
0°-90°	5996.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5996.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2106	2106	2106	2106	2106	
5°	2097	2101	2091	2103	2104	199
15°	2006	2011	2015	2032	2036	565
25°	1823	1838	1857	1887	1893	840
35°	1575	1594	1632	1672	1684	983
45°	1270	1301	1358	1409	1421	979
55°	947	988	1061	1116	1128	849
65°	623	670	756	819	834	620
75°	316	377	474	539	554	335
85°	65	120	149	145	145	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2106.4	2106.4	2106.4	2106.4	2106.4
2.5°	2108.3	2108.3	2098.8	2108.3	2110.2
5°	2096.9	2100.7	2091.2	2102.6	2104.5
7.5°	2085.5	2085.5	2079.8	2091.2	2093.1
10°	2064.5	2066.4	2064.5	2077.9	2079.8
12.5°	2037.9	2041.7	2043.6	2056.9	2058.8
15°	2005.5	2011.2	2015.0	2032.2	2036.0
17.5°	1969.3	1975.0	1984.5	2003.6	2007.4
20°	1925.5	1933.1	1944.5	1969.3	1975.0
22.5°	1877.9	1885.5	1904.6	1927.4	1936.9
25°	1822.7	1837.9	1856.9	1887.4	1893.1
27.5°	1767.4	1780.8	1805.5	1837.9	1845.5
30°	1702.7	1723.6	1754.1	1786.5	1794.1
32.5°	1639.8	1660.8	1697.0	1731.2	1740.8
35°	1575.1	1594.1	1632.2	1672.2	1683.6
37.5°	1500.8	1525.5	1567.4	1607.4	1618.9
40°	1422.7	1453.2	1500.8	1542.7	1556.0
42.5°	1348.4	1380.8	1428.4	1474.1	1489.4
45°	1270.3	1300.8	1357.9	1409.4	1420.8
47.5°	1190.3	1224.6	1285.6	1337.0	1356.0
50°	1110.4	1146.5	1211.3	1264.6	1276.0
52.5°	1030.4	1068.5	1137.0	1194.2	1199.9
55°	946.6	988.5	1060.8	1116.1	1127.5
57.5°	870.4	906.6	984.7	1041.8	1055.1
60°	786.6	826.6	910.4	963.7	980.8
62.5°	706.6	748.5	836.1	889.4	904.7
65°	622.8	670.4	756.1	819.0	834.2
67.5°	550.4	596.1	687.5	748.5	763.7
70°	466.6	518.0	615.2	678.0	693.3
72.5°	394.2	447.6	544.7	605.6	628.5
75°	316.2	377.1	474.2	539.0	554.2
77.5°	240.0	310.4	409.5	459.0	459.0
80°	171.4	245.7	337.1	360.0	363.8
82.5°	112.4	184.7	249.5	247.6	247.6
85°	64.8	120.0	148.6	144.7	144.7
87.5°	24.8	49.5	53.3	53.3	51.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)