

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: P389355

Luminaire Tested: **22CZ2-65VHE-S-UNV-L940-CD1-SDWPD1-U**

Issue Date: 2/28/2020

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: P389355
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-65VHE-S-UNV-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5744.0 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

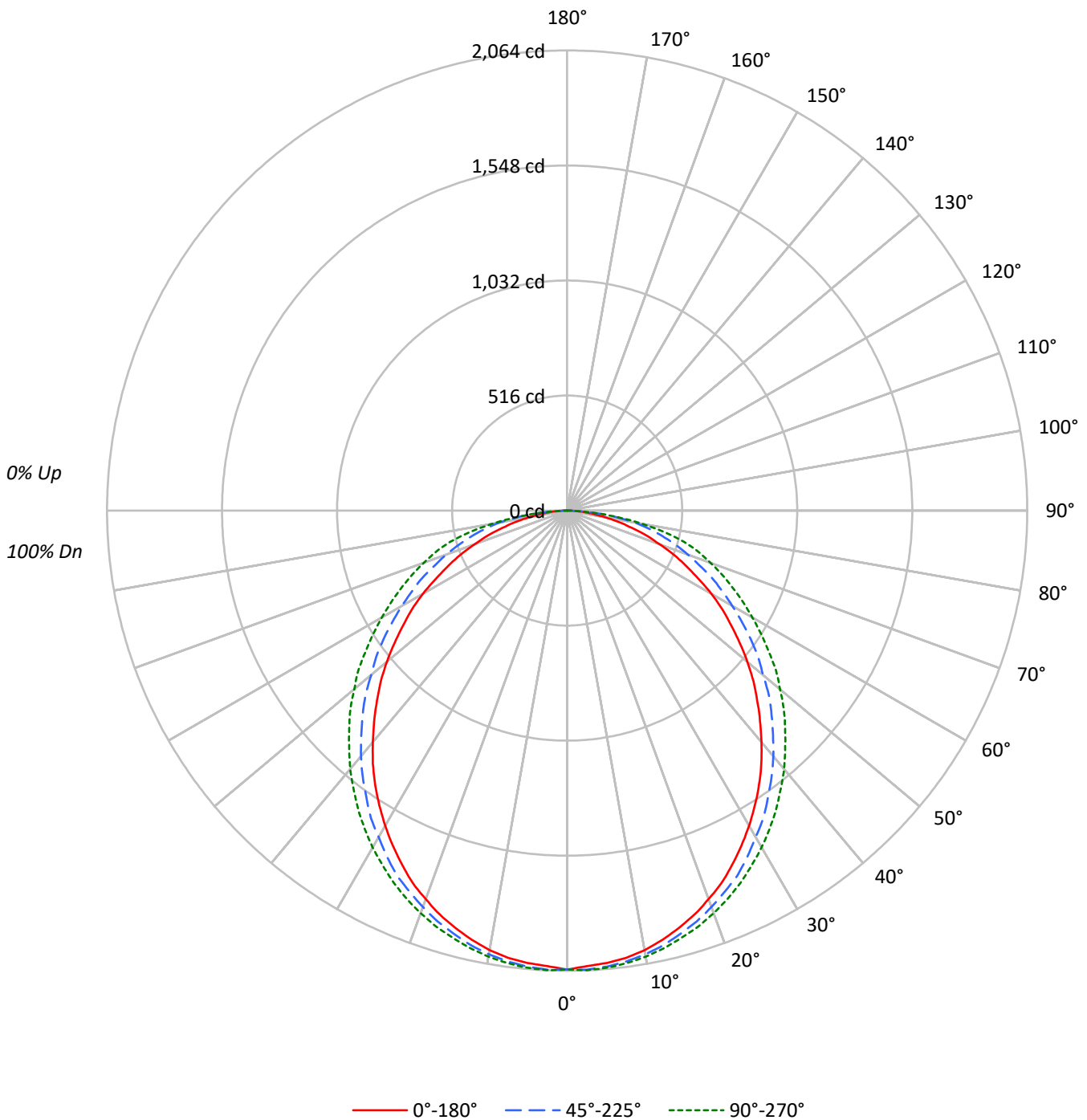
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5539	5539	5539
5°	5502	5545	5560
10°	5470	5522	5551
15°	5398	5473	5525
20°	5311	5418	5503
25°	5204	5363	5467
30°	5071	5255	5421
35°	4930	5159	5370
40°	4764	5056	5319
45°	4590	4936	5263
50°	4420	4802	5217
55°	4212	4715	5180
60°	4024	4601	5163
65°	3754	4573	5222
70°	3458	4533	5377
75°	3121	4598	5656
80°	2700	4734	5315
85°	2235	3971	3971



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.6	3.4
10°-20°	553.9	9.6
20°-30°	828.8	14.4
30°-40°	981.5	17.1
40°-50°	1000.3	17.4
50°-60°	896.5	15.6
60°-70°	701.9	12.2
70°-80°	452.6	7.9
80°-90°	133.7	2.3
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°	1577.4	27.5
0°-40°	2558.9	44.5
0°-60°	4455.7	77.6
0°-90°	5744.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5744.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2058	2058	2058	2058	2058	
5°	2037	2042	2053	2056	2058	193
15°	1938	1948	1964	1980	1983	546
25°	1753	1769	1806	1830	1841	807
35°	1501	1520	1570	1619	1635	938
45°	1206	1233	1297	1364	1383	931
55°	898	927	1005	1075	1104	805
65°	590	624	718	788	820	586
75°	300	346	442	517	544	322
85°	72	99	129	129	129	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2058.3	2058.3	2058.3	2058.3	2058.3
2.5°	2044.9	2050.2	2060.9	2063.6	2063.6
5°	2036.8	2042.2	2052.9	2055.6	2058.3
7.5°	2023.4	2026.1	2039.5	2044.9	2047.5
10°	2002.0	2007.3	2020.7	2028.8	2031.5
12.5°	1972.5	1980.5	1996.6	2007.3	2010.0
15°	1937.7	1948.4	1964.5	1980.5	1983.2
17.5°	1900.1	1910.9	1932.3	1951.1	1956.4
20°	1854.6	1868.0	1892.1	1913.5	1921.6
22.5°	1809.0	1819.7	1849.2	1876.0	1884.1
25°	1752.7	1768.8	1806.3	1830.5	1841.2
27.5°	1693.8	1712.5	1750.1	1782.2	1792.9
30°	1632.1	1650.9	1691.1	1731.3	1744.7
32.5°	1567.8	1589.3	1637.5	1677.7	1691.1
35°	1500.8	1519.6	1570.5	1618.7	1634.8
37.5°	1431.1	1447.2	1506.2	1557.1	1573.2
40°	1356.1	1377.5	1439.2	1498.1	1514.2
42.5°	1281.0	1305.2	1366.8	1431.1	1447.2
45°	1206.0	1232.8	1297.1	1364.1	1382.9
47.5°	1133.6	1155.1	1227.4	1291.8	1318.6
50°	1055.9	1077.4	1147.0	1219.4	1246.2
52.5°	975.5	1005.0	1080.0	1149.7	1181.9
55°	897.8	927.3	1005.0	1074.7	1104.2
57.5°	825.4	849.6	930.0	1002.3	1031.8
60°	747.7	769.2	854.9	932.6	959.4
62.5°	664.6	696.8	785.2	857.6	889.8
65°	589.6	624.4	718.2	787.9	820.1
67.5°	519.9	552.1	643.2	718.2	753.1
70°	439.5	482.4	576.2	651.2	683.4
72.5°	375.2	412.7	509.2	584.2	619.1
75°	300.2	345.7	442.2	517.2	544.0
77.5°	238.5	284.1	375.2	434.2	447.6
80°	174.2	219.8	305.5	335.0	343.0
82.5°	117.9	160.8	219.8	227.8	230.5
85°	72.4	99.2	128.6	128.6	128.6
87.5°	34.8	40.2	45.6	42.9	42.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)