

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: P389335

Luminaire Tested: **22CZ2-60VHE-S-UNV-L950-CD1-SWPD1-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: P389335
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: 22CZ2-60VHE-S-UNV-L950-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5748.8 lumens
Efficiency: N/A
Efficacy: 130.4 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

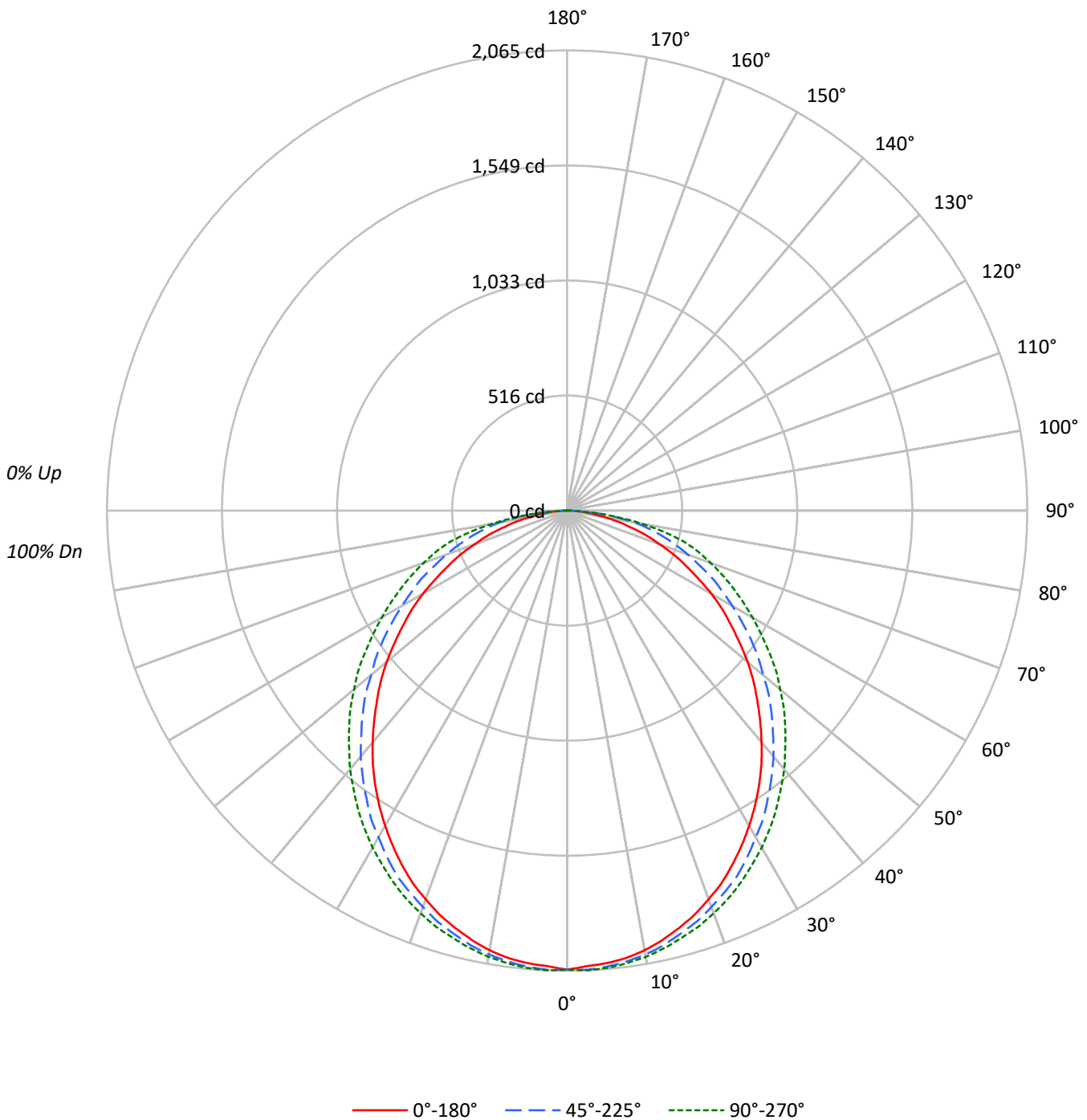
Input Watts (W): 44.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5543	5543	5543
5°	5507	5550	5565
10°	5475	5526	5556
15°	5403	5477	5530
20°	5315	5423	5507
25°	5209	5368	5471
30°	5076	5259	5426
35°	4935	5163	5375
40°	4768	5060	5324
45°	4593	4940	5267
50°	4424	4806	5222
55°	4216	4719	5185
60°	4028	4605	5168
65°	3757	4577	5226
70°	3461	4537	5382
75°	3123	4602	5661
80°	2701	4739	5320
85°	2235	3974	3974



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.8	3.4
10°-20°	554.4	9.6
20°-30°	829.5	14.4
30°-40°	982.3	17.1
40°-50°	1001.1	17.4
50°-60°	897.3	15.6
60°-70°	702.5	12.2
70°-80°	453.0	7.9
80°-90°	133.8	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°	1578.7	27.5
0°-40°	2561.1	44.5
0°-60°	4459.5	77.6
0°-90°	5748.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5748.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2060	2060	2060	2060	2060	
5°	2038	2044	2055	2057	2060	194
15°	1939	1950	1966	1982	1985	547
25°	1754	1770	1808	1832	1843	808
35°	1502	1521	1572	1620	1636	939
45°	1207	1234	1298	1365	1384	932
55°	899	928	1006	1076	1105	806
65°	590	625	719	789	821	586
75°	300	346	443	518	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°	2060.0	2060.0	2060.0	2060.0	2060.0
2.5°	2046.6	2051.9	2062.7	2065.3	2065.3
5°	2038.5	2043.9	2054.6	2057.3	2060.0
7.5°	2025.1	2027.8	2041.2	2046.6	2049.2
10°	2003.6	2009.0	2022.4	2030.5	2033.2
12.5°	1974.1	1982.2	1998.3	2009.0	2011.7
15°	1939.3	1950.0	1966.1	1982.2	1984.9
17.5°	1901.7	1912.5	1933.9	1952.7	1958.0
20°	1856.1	1869.5	1893.7	1915.1	1923.2
22.5°	1810.5	1821.3	1850.8	1877.6	1885.6
25°	1754.2	1770.3	1807.8	1832.0	1842.7
27.5°	1695.2	1714.0	1751.5	1783.7	1794.4
30°	1633.5	1652.3	1692.5	1732.7	1746.2
32.5°	1569.1	1590.6	1638.9	1679.1	1692.5
35°	1502.1	1520.8	1571.8	1620.1	1636.2
37.5°	1432.3	1448.4	1507.4	1558.4	1574.5
40°	1357.2	1378.7	1440.4	1499.4	1515.5
42.5°	1282.1	1306.3	1368.0	1432.3	1448.4
45°	1207.0	1233.8	1298.2	1365.3	1384.0
47.5°	1134.6	1156.1	1228.5	1292.8	1319.7
50°	1056.8	1078.3	1148.0	1220.4	1247.3
52.5°	976.3	1005.8	1081.0	1150.7	1182.9
55°	898.6	928.1	1005.8	1075.6	1105.1
57.5°	826.1	850.3	930.7	1003.2	1032.7
60°	748.4	769.8	855.6	933.4	960.2
62.5°	665.2	697.4	785.9	858.3	890.5
65°	590.1	625.0	718.8	788.6	820.8
67.5°	520.4	552.5	643.7	718.8	753.7
70°	439.9	482.8	576.7	651.8	684.0
72.5°	375.5	413.1	509.6	584.7	619.6
75°	300.4	346.0	442.6	517.7	544.5
77.5°	238.7	284.3	375.5	434.5	447.9
80°	174.3	219.9	305.8	335.3	343.3
82.5°	118.0	160.9	219.9	228.0	230.7
85°	72.4	99.2	128.7	128.7	128.7
87.5°	34.9	40.2	45.6	42.9	42.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)