

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: P390703

Luminaire Tested: **22CZ2-80VHE-HRP-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: P390703
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-80VHE-HRP-UNV-L950-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6150.7 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

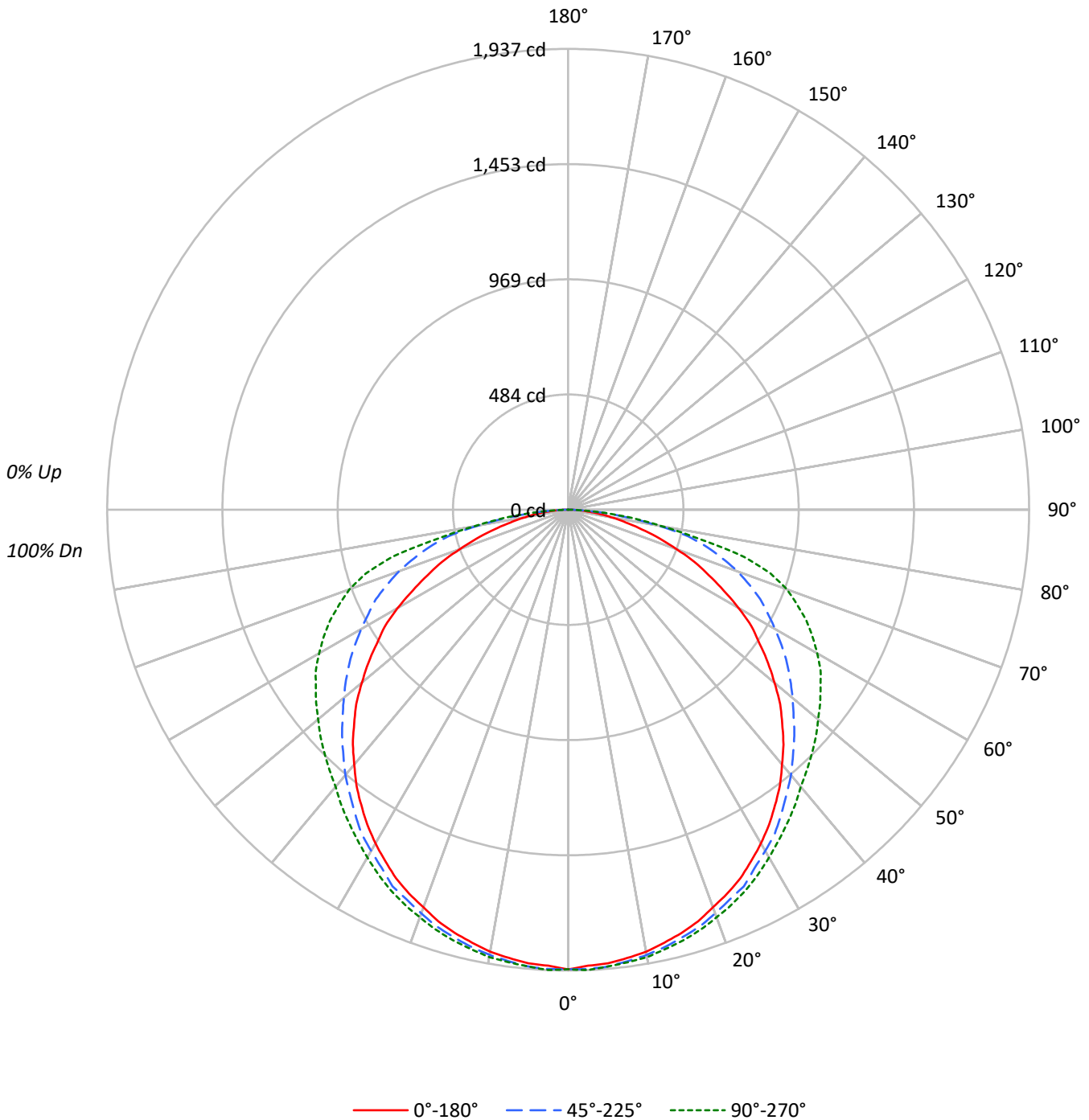
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5199	5199	5199
5°	5170	5207	5207
10°	5156	5193	5217
15°	5130	5181	5219
20°	5092	5170	5222
25°	5078	5186	5239
30°	5033	5146	5244
35°	4980	5128	5277
40°	4911	5118	5341
45°	4838	5114	5510
50°	4736	5152	5740
55°	4607	5264	6071
60°	4456	5406	6502
65°	4149	5676	7030
70°	3809	5945	7689
75°	3341	6257	7951
80°	2875	5960	6241
85°	2513	4332	4749



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.8	3.0
10°-20°	524.7	8.5
20°-30°	800.6	13.0
30°-40°	977.5	15.9
40°-50°	1045.2	17.0
50°-60°	1008.8	16.4
60°-70°	868.4	14.1
70°-80°	587.6	9.6
80°-90°	155.0	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°	1508.1	24.5
0°-40°	2485.6	40.4
0°-60°	4539.6	73.8
0°-90°	6150.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6150.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1932	1932	1932	1932	1932	
5°	1914	1918	1928	1928	1928	182
15°	1842	1846	1860	1869	1873	520
25°	1710	1719	1746	1756	1765	787
35°	1516	1529	1561	1593	1606	948
45°	1271	1294	1344	1412	1448	981
55°	982	1014	1122	1235	1294	880
65°	652	715	891	1032	1104	648
75°	321	425	602	724	765	345
85°	81	113	140	145	154	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1932.0	1932.0	1932.0	1932.0	1932.0
2.5°	1918.5	1923.0	1932.0	1932.0	1936.6
5°	1913.9	1918.5	1927.5	1927.5	1927.5
7.5°	1900.4	1904.9	1913.9	1918.5	1918.5
10°	1886.8	1891.3	1900.4	1904.9	1909.4
12.5°	1864.2	1868.7	1882.3	1891.3	1891.3
15°	1841.5	1846.1	1859.6	1868.7	1873.2
17.5°	1814.4	1823.4	1837.0	1846.1	1850.6
20°	1778.2	1787.3	1805.4	1818.9	1823.4
22.5°	1746.5	1755.6	1773.7	1787.3	1796.3
25°	1710.3	1719.4	1746.5	1755.6	1764.6
27.5°	1665.1	1674.1	1696.8	1714.9	1728.4
30°	1619.8	1628.9	1656.0	1678.7	1687.7
32.5°	1570.1	1583.6	1615.3	1633.4	1647.0
35°	1515.8	1529.3	1561.0	1592.7	1606.3
37.5°	1461.5	1475.0	1506.7	1547.4	1565.5
40°	1398.1	1416.2	1456.9	1511.2	1520.3
42.5°	1339.3	1361.9	1398.1	1461.5	1484.1
45°	1271.4	1294.1	1343.8	1411.7	1447.9
47.5°	1208.1	1230.7	1285.0	1366.5	1411.7
50°	1131.2	1162.8	1230.7	1325.7	1371.0
52.5°	1058.8	1085.9	1176.4	1280.5	1334.8
55°	981.9	1013.5	1122.1	1235.2	1294.1
57.5°	914.0	941.1	1063.3	1190.0	1257.9
60°	828.0	864.2	1004.5	1140.2	1208.1
62.5°	737.5	791.8	945.7	1085.9	1158.3
65°	651.6	714.9	891.4	1031.6	1104.0
67.5°	574.6	642.5	823.5	972.8	1040.7
70°	484.1	570.1	755.6	900.4	977.3
72.5°	402.7	497.7	678.7	823.5	891.4
75°	321.3	425.3	601.8	724.0	764.7
77.5°	248.9	348.4	515.8	552.0	556.5
80°	185.5	276.0	384.6	389.1	402.7
82.5°	126.7	194.6	248.9	271.5	276.0
85°	81.4	113.1	140.3	144.8	153.8
87.5°	36.2	40.7	49.8	45.2	45.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)