

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: P390704

Luminaire Tested: **22CZ2-80VHE-HRP-UNV-L950-CD1-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: P390704
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-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: 6227.9 lumens
Efficiency: N/A
Efficacy: 105.4 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

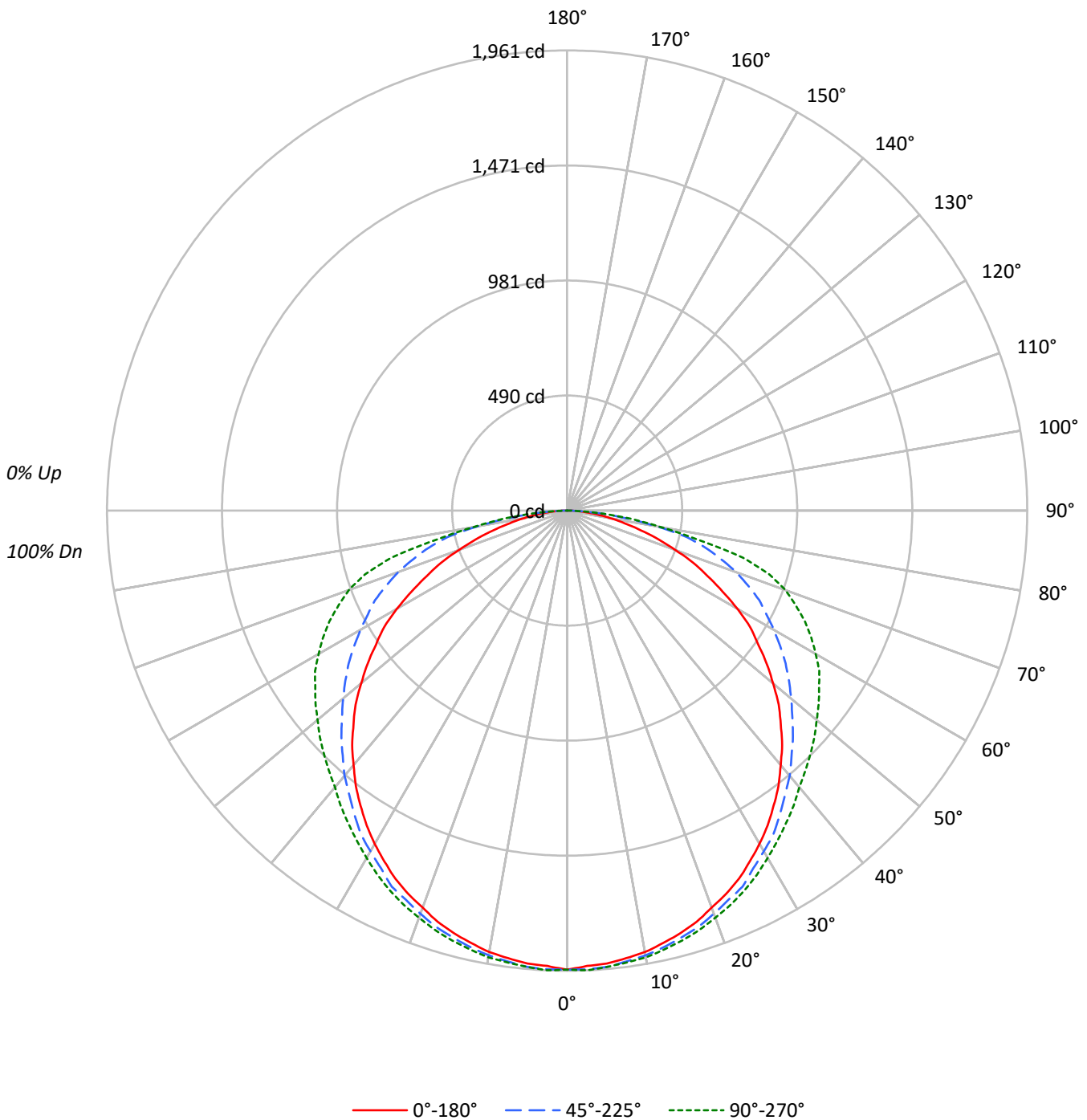
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5264	5264	5264
5°	5235	5272	5272
10°	5220	5258	5283
15°	5195	5246	5284
20°	5156	5235	5287
25°	5142	5251	5305
30°	5097	5210	5310
35°	5042	5192	5343
40°	4973	5182	5408
45°	4899	5178	5579
50°	4795	5217	5812
55°	4664	5331	6147
60°	4512	5474	6584
65°	4201	5747	7118
70°	3857	6020	7786
75°	3382	6335	8051
80°	2910	6034	6320
85°	2547	4384	4810



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.1	3.0
10°-20°	531.3	8.5
20°-30°	810.6	13.0
30°-40°	989.8	15.9
40°-50°	1058.3	17.0
50°-60°	1021.5	16.4
60°-70°	879.3	14.1
70°-80°	595.0	9.6
80°-90°	157.0	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°	1527.0	24.5
0°-40°	2516.8	40.4
0°-60°	4596.6	73.8
0°-90°	6227.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6227.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1956	1956	1956	1956	1956	
5°	1938	1942	1952	1952	1952	184
15°	1865	1869	1883	1892	1897	526
25°	1732	1741	1768	1778	1787	797
35°	1535	1548	1581	1613	1626	960
45°	1287	1310	1361	1429	1466	994
55°	994	1026	1136	1251	1310	891
65°	660	724	903	1045	1118	656
75°	325	431	609	733	774	349
85°	82	114	142	147	156	93
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1956.3	1956.3	1956.3	1956.3	1956.3
2.5°	1942.5	1947.1	1956.3	1956.3	1960.9
5°	1938.0	1942.5	1951.7	1951.7	1951.7
7.5°	1924.2	1928.8	1938.0	1942.5	1942.5
10°	1910.5	1915.1	1924.2	1928.8	1933.4
12.5°	1887.6	1892.2	1905.9	1915.1	1915.1
15°	1864.7	1869.2	1883.0	1892.2	1896.7
17.5°	1837.2	1846.3	1860.1	1869.2	1873.8
20°	1800.5	1809.7	1828.0	1841.8	1846.3
22.5°	1768.5	1777.6	1795.9	1809.7	1818.8
25°	1731.8	1741.0	1768.5	1777.6	1786.8
27.5°	1686.0	1695.1	1718.1	1736.4	1750.1
30°	1640.2	1649.3	1676.8	1699.7	1708.9
32.5°	1589.8	1603.5	1635.6	1653.9	1667.7
35°	1534.8	1548.5	1580.6	1612.7	1626.4
37.5°	1479.8	1493.6	1525.6	1566.9	1585.2
40°	1415.7	1434.0	1475.2	1530.2	1539.4
42.5°	1356.1	1379.0	1415.7	1479.8	1502.7
45°	1287.4	1310.3	1360.7	1429.4	1466.1
47.5°	1223.3	1246.2	1301.1	1383.6	1429.4
50°	1145.4	1177.4	1246.2	1342.4	1388.2
52.5°	1072.1	1099.6	1191.2	1296.6	1351.5
55°	994.2	1026.3	1136.2	1250.7	1310.3
57.5°	925.5	952.9	1076.6	1204.9	1273.7
60°	838.4	875.1	1017.1	1154.5	1223.3
62.5°	746.8	801.8	957.5	1099.6	1172.9
65°	659.7	723.9	902.6	1044.6	1117.9
67.5°	581.8	650.6	833.8	985.0	1053.7
70°	490.2	577.3	765.1	911.7	989.6
72.5°	407.8	504.0	687.2	833.8	902.6
75°	325.3	430.7	609.3	733.0	774.3
77.5°	252.0	352.8	522.3	558.9	563.5
80°	187.8	279.5	389.4	394.0	407.8
82.5°	128.3	197.0	252.0	274.9	279.5
85°	82.5	114.5	142.0	146.6	155.8
87.5°	36.7	41.2	50.4	45.8	45.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)