

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: P390645

Luminaire Tested: **22CZ2-75VHE-HRP-UNV-L930-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: P390645
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: 22CZ2-75VHE-HRP-UNV-L930-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5163.8 lumens
Efficiency: N/A
Efficacy: 94.4 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

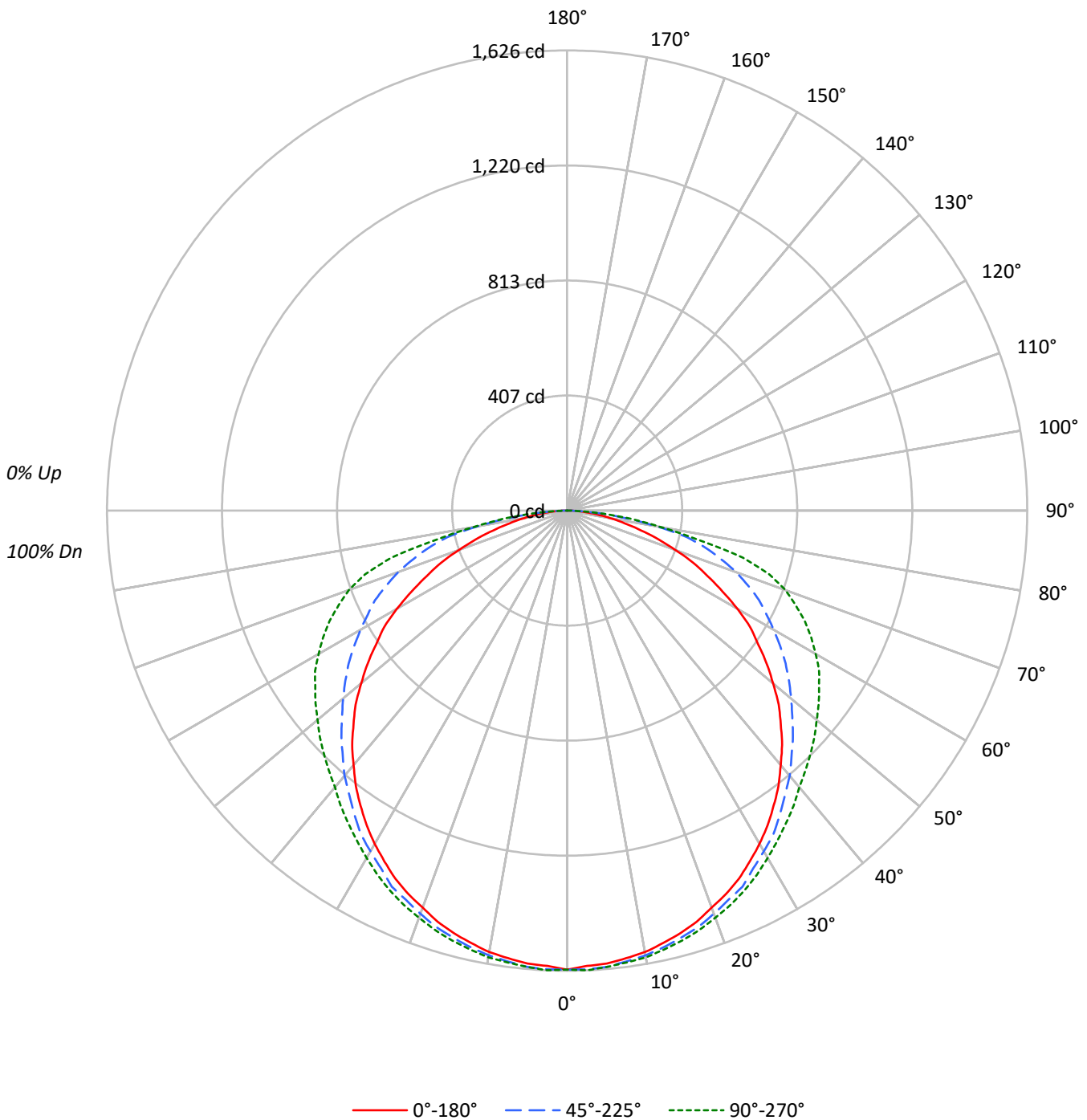
Input Watts (W): 54.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4365	4365	4365
5°	4340	4371	4371
10°	4329	4359	4380
15°	4307	4350	4381
20°	4275	4340	4384
25°	4263	4354	4399
30°	4226	4320	4403
35°	4181	4305	4430
40°	4123	4297	4484
45°	4062	4293	4626
50°	3976	4325	4819
55°	3867	4420	5097
60°	3742	4539	5458
65°	3483	4765	5902
70°	3198	4991	6456
75°	2804	5253	6675
80°	2413	5004	5239
85°	2112	3637	3989



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.4	3.0
10°-20°	440.5	8.5
20°-30°	672.1	13.0
30°-40°	820.7	15.9
40°-50°	877.5	17.0
50°-60°	847.0	16.4
60°-70°	729.1	14.1
70°-80°	493.3	9.6
80°-90°	130.2	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°	1266.1	24.5
0°-40°	2086.8	40.4
0°-60°	3811.2	73.8
0°-90°	5163.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5163.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1622	1622	1622	1622	1622	
5°	1607	1611	1618	1618	1618	153
15°	1546	1550	1561	1569	1573	436
25°	1436	1444	1466	1474	1482	661
35°	1273	1284	1310	1337	1348	796
45°	1067	1086	1128	1185	1216	824
55°	824	851	942	1037	1086	739
65°	547	600	748	866	927	544
75°	270	357	505	608	642	289
85°	68	95	118	122	129	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1622.0	1622.0	1622.0	1622.0	1622.0
2.5°	1610.6	1614.4	1622.0	1622.0	1625.8
5°	1606.8	1610.6	1618.2	1618.2	1618.2
7.5°	1595.4	1599.2	1606.8	1610.6	1610.6
10°	1584.1	1587.9	1595.4	1599.2	1603.0
12.5°	1565.1	1568.9	1580.3	1587.9	1587.9
15°	1546.1	1549.9	1561.3	1568.9	1572.7
17.5°	1523.3	1530.9	1542.3	1549.9	1553.7
20°	1492.9	1500.5	1515.7	1527.1	1530.9
22.5°	1466.3	1473.9	1489.1	1500.5	1508.1
25°	1435.9	1443.5	1466.3	1473.9	1481.5
27.5°	1397.9	1405.5	1424.5	1439.7	1451.1
30°	1359.9	1367.5	1390.3	1409.3	1416.9
32.5°	1318.1	1329.5	1356.1	1371.3	1382.7
35°	1272.6	1284.0	1310.5	1337.1	1348.5
37.5°	1227.0	1238.4	1265.0	1299.2	1314.3
40°	1173.8	1189.0	1223.2	1268.8	1276.4
42.5°	1124.4	1143.4	1173.8	1227.0	1246.0
45°	1067.4	1086.4	1128.2	1185.2	1215.6
47.5°	1014.2	1033.2	1078.8	1147.2	1185.2
50°	949.7	976.3	1033.2	1113.0	1151.0
52.5°	888.9	911.7	987.7	1075.0	1120.6
55°	824.3	850.9	942.1	1037.0	1086.4
57.5°	767.3	790.1	892.7	999.1	1056.0
60°	695.2	725.5	843.3	957.3	1014.2
62.5°	619.2	664.8	793.9	911.7	972.5
65°	547.0	600.2	748.3	866.1	926.9
67.5°	482.4	539.4	691.4	816.7	873.7
70°	406.5	478.6	634.4	755.9	820.5
72.5°	338.1	417.9	569.8	691.4	748.3
75°	269.7	357.1	505.2	607.8	642.0
77.5°	208.9	292.5	433.1	463.4	467.2
80°	155.7	231.7	322.9	326.7	338.1
82.5°	106.4	163.3	208.9	227.9	231.7
85°	68.4	95.0	117.8	121.6	129.2
87.5°	30.4	34.2	41.8	38.0	38.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)