

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: P388085

Luminaire Tested: **22CZ2-55VHE-SQR-UNV-L935-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: P388085
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-55VHE-SQR-UNV-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4490.3 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

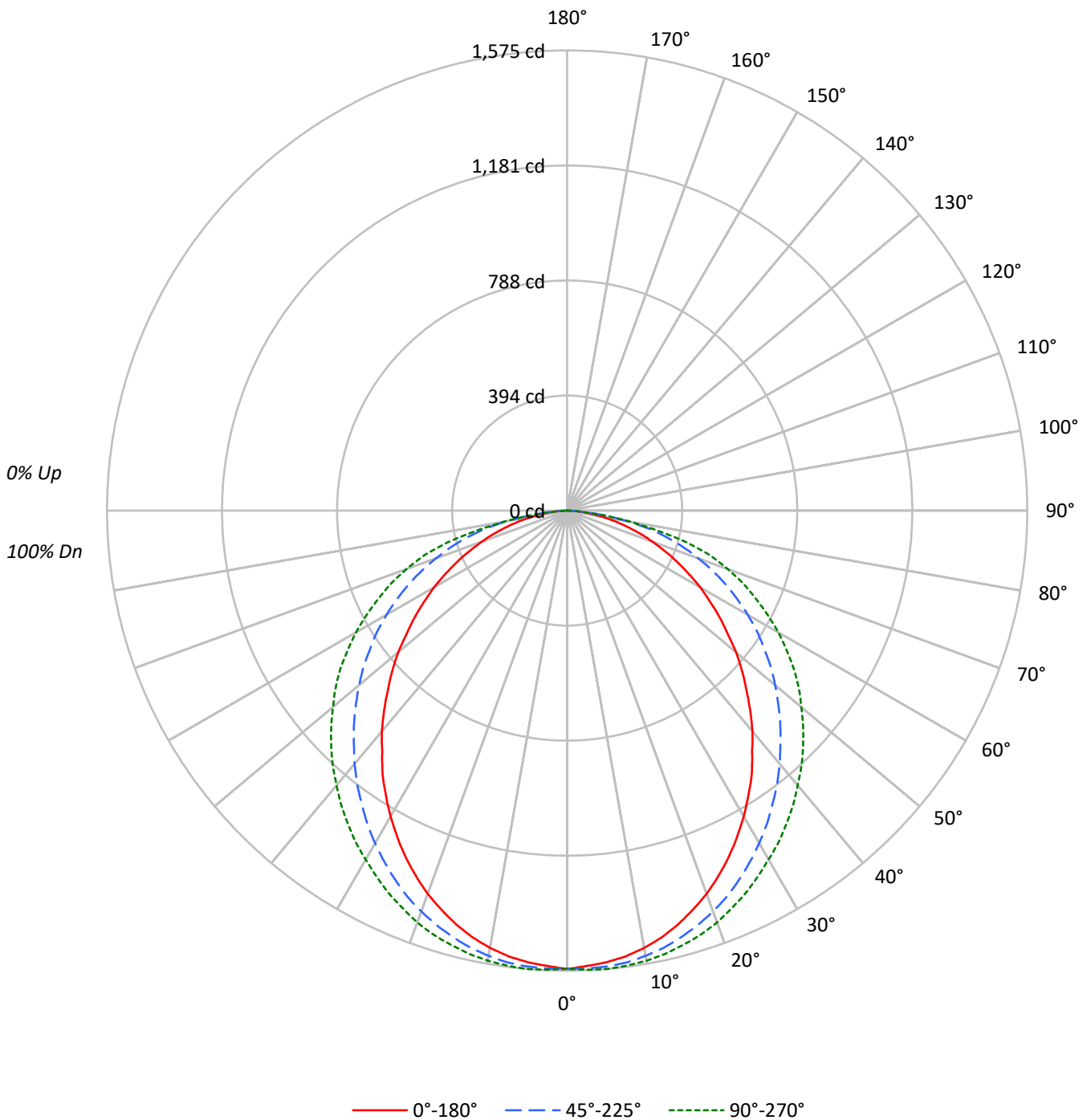
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	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	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4221	4221	4221
5°	4191	4231	4254
10°	4152	4228	4274
15°	4085	4210	4287
20°	3997	4181	4297
25°	3885	4138	4290
30°	3755	4086	4285
35°	3619	4026	4299
40°	3466	3975	4312
45°	3301	3925	4347
50°	3158	3890	4381
55°	2989	3859	4449
60°	2833	3843	4496
65°	2646	3813	4532
70°	2431	3756	4595
75°	2194	3656	4431
80°	1883	3237	3336
85°	1513	1908	1513



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.7	3.3
10°-20°	425.2	9.5
20°-30°	638.6	14.2
30°-40°	761.6	17.0
40°-50°	787.4	17.5
50°-60°	723.9	16.1
60°-70°	576.3	12.8
70°-80°	352.1	7.8
80°-90°	76.5	1.7
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°	1212.4	27.0
0°-40°	1974.0	44.0
0°-60°	3485.3	77.6
0°-90°	4490.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4490.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1569	1569	1569	1569	1569	
5°	1552	1556	1566	1573	1575	147
15°	1466	1483	1511	1532	1539	413
25°	1309	1340	1394	1432	1445	602
35°	1102	1149	1225	1289	1309	687
45°	867	929	1032	1115	1142	671
55°	637	708	823	916	948	570
65°	416	486	599	682	712	412
75°	211	273	352	414	426	225
85°	49	60	62	53	49	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1568.6	1568.6	1568.6	1568.6	1568.6
2.5°	1560.0	1562.2	1568.6	1572.8	1572.8
5°	1551.5	1555.8	1566.4	1572.8	1575.0
7.5°	1538.7	1545.1	1560.0	1568.6	1570.7
10°	1519.6	1528.1	1547.3	1560.0	1564.3
12.5°	1496.1	1508.9	1532.3	1549.4	1553.7
15°	1466.3	1483.3	1511.0	1532.3	1538.7
17.5°	1432.2	1453.5	1487.6	1513.2	1521.7
20°	1395.9	1417.3	1459.9	1489.7	1500.4
22.5°	1353.3	1381.0	1430.0	1464.1	1472.7
25°	1308.6	1340.5	1393.8	1432.2	1445.0
27.5°	1259.5	1297.9	1355.4	1402.3	1413.0
30°	1208.4	1248.9	1315.0	1366.1	1378.9
32.5°	1155.1	1202.0	1272.3	1329.9	1346.9
35°	1101.8	1148.7	1225.4	1289.4	1308.6
37.5°	1040.0	1095.4	1180.7	1246.8	1270.2
40°	986.7	1040.0	1131.7	1204.1	1227.6
42.5°	927.1	984.6	1080.5	1159.4	1187.1
45°	867.4	929.2	1031.5	1114.6	1142.3
47.5°	812.0	873.8	980.4	1067.7	1095.4
50°	754.4	818.4	929.2	1018.7	1046.4
52.5°	692.6	763.0	878.1	967.6	999.5
55°	637.2	707.6	822.6	916.4	948.4
57.5°	579.7	652.2	771.5	861.0	890.8
60°	526.4	596.7	714.0	801.3	835.4
62.5°	468.9	541.3	656.4	741.7	773.6
65°	415.6	485.9	598.9	682.0	711.8
67.5°	362.3	432.6	539.2	618.1	652.2
70°	309.0	379.4	477.4	554.1	584.0
72.5°	262.1	323.9	417.7	488.0	515.8
75°	211.0	272.8	351.6	413.5	426.2
77.5°	164.1	219.5	285.6	313.3	317.6
80°	121.5	164.1	208.9	215.3	215.3
82.5°	81.0	113.0	130.0	132.1	130.0
85°	49.0	59.7	61.8	53.3	49.0
87.5°	17.0	17.0	10.7	6.4	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)