

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: P388372

Luminaire Tested: **22CZ2-55VHE-UNV-L940-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: P388372
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-55VHE-UNV-L940-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4665.3 lumens
Efficiency: N/A
Efficacy: 118.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

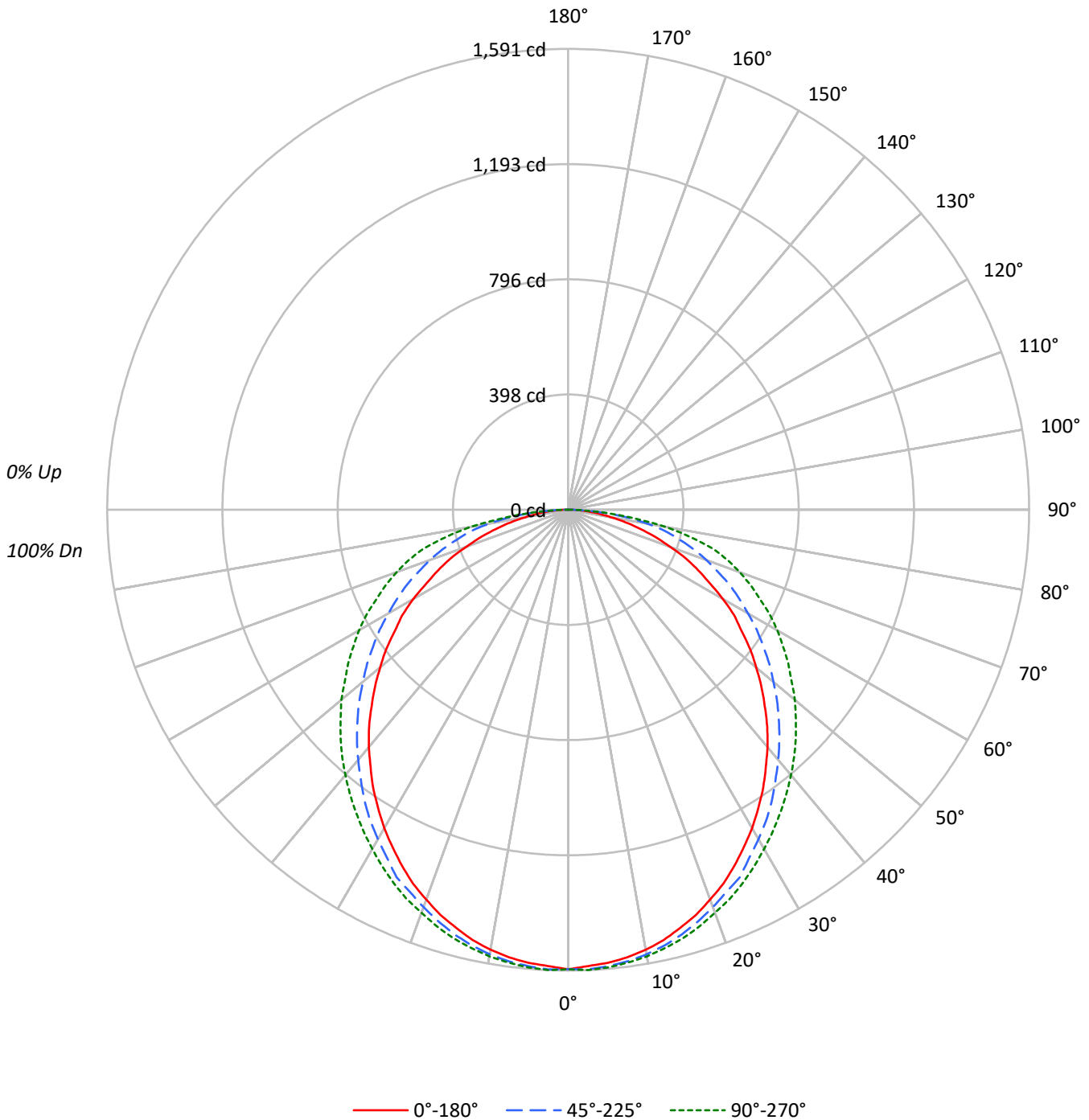
Input Watts (W): 39.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4269	4269	4269
5°	4242	4273	4285
10°	4215	4259	4278
15°	4164	4227	4266
20°	4102	4181	4240
25°	4028	4158	4226
30°	3945	4080	4201
35°	3854	4027	4193
40°	3758	3960	4201
45°	3652	3914	4228
50°	3546	3873	4277
55°	3425	3856	4351
60°	3323	3855	4485
65°	3158	3917	4648
70°	2944	3991	4949
75°	2697	4129	5346
80°	2348	4305	5266
85°	2056	3829	4181



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.0	3.2
10°-20°	427.3	9.2
20°-30°	641.5	13.7
30°-40°	766.5	16.4
40°-50°	797.0	17.1
50°-60°	738.7	15.8
60°-70°	605.9	13.0
70°-80°	409.6	8.8
80°-90°	128.7	2.8
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°	1218.8	26.1
0°-40°	1985.3	42.6
0°-60°	3521.0	75.5
0°-90°	4665.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4665.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1586	1586	1586	1586	1586	
5°	1570	1572	1582	1584	1586	149
15°	1494	1501	1517	1527	1531	422
25°	1357	1368	1400	1416	1423	625
35°	1173	1189	1226	1263	1276	733
45°	960	978	1028	1088	1111	741
55°	730	753	822	895	927	656
65°	496	523	615	696	730	490
75°	259	303	397	478	514	275
85°	67	92	124	138	135	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1586.3	1586.3	1586.3	1586.3	1586.3
2.5°	1577.1	1581.7	1588.6	1590.9	1590.9
5°	1570.2	1572.5	1581.7	1584.0	1586.3
7.5°	1558.7	1563.3	1572.5	1574.8	1577.1
10°	1542.7	1547.3	1558.7	1563.3	1565.6
12.5°	1522.0	1526.6	1540.4	1547.3	1549.6
15°	1494.5	1501.3	1517.4	1526.6	1531.2
17.5°	1466.9	1473.8	1489.9	1503.6	1508.2
20°	1432.5	1448.5	1460.0	1478.4	1480.7
22.5°	1398.0	1407.2	1427.9	1446.3	1455.4
25°	1356.7	1368.2	1400.3	1416.4	1423.3
27.5°	1313.1	1329.2	1354.4	1379.7	1388.9
30°	1269.5	1281.0	1313.1	1343.0	1352.1
32.5°	1221.3	1237.4	1271.8	1301.6	1315.4
35°	1173.1	1189.1	1225.9	1262.6	1276.4
37.5°	1120.3	1138.6	1175.4	1219.0	1237.4
40°	1069.8	1083.5	1127.2	1180.0	1196.0
42.5°	1017.0	1033.0	1079.0	1136.3	1154.7
45°	959.6	977.9	1028.4	1088.1	1111.1
47.5°	904.5	922.8	977.9	1037.6	1065.2
50°	847.1	870.0	925.1	994.0	1021.6
52.5°	792.0	812.7	874.6	945.8	971.1
55°	730.0	753.0	821.8	895.3	927.4
57.5°	679.5	695.6	771.3	847.1	879.2
60°	617.5	638.2	716.2	796.6	833.3
62.5°	551.0	585.4	665.7	748.4	785.1
65°	495.9	523.4	615.2	695.6	730.0
67.5°	438.5	468.3	557.8	642.8	681.8
70°	374.2	413.2	507.3	592.3	629.0
72.5°	316.8	358.1	454.5	537.2	576.2
75°	259.4	303.0	397.1	477.5	514.2
77.5°	204.3	252.5	344.3	406.3	429.3
80°	151.5	197.4	277.8	321.4	339.8
82.5°	105.6	144.6	204.3	227.3	231.9
85°	66.6	91.8	124.0	137.7	135.4
87.5°	29.8	36.7	45.9	50.5	48.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)