

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: P277340

Luminaire Tested: **22CZ2-39HE-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277340
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39HE-S-UNV-L83050-W2A1-U-3000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3658.0 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

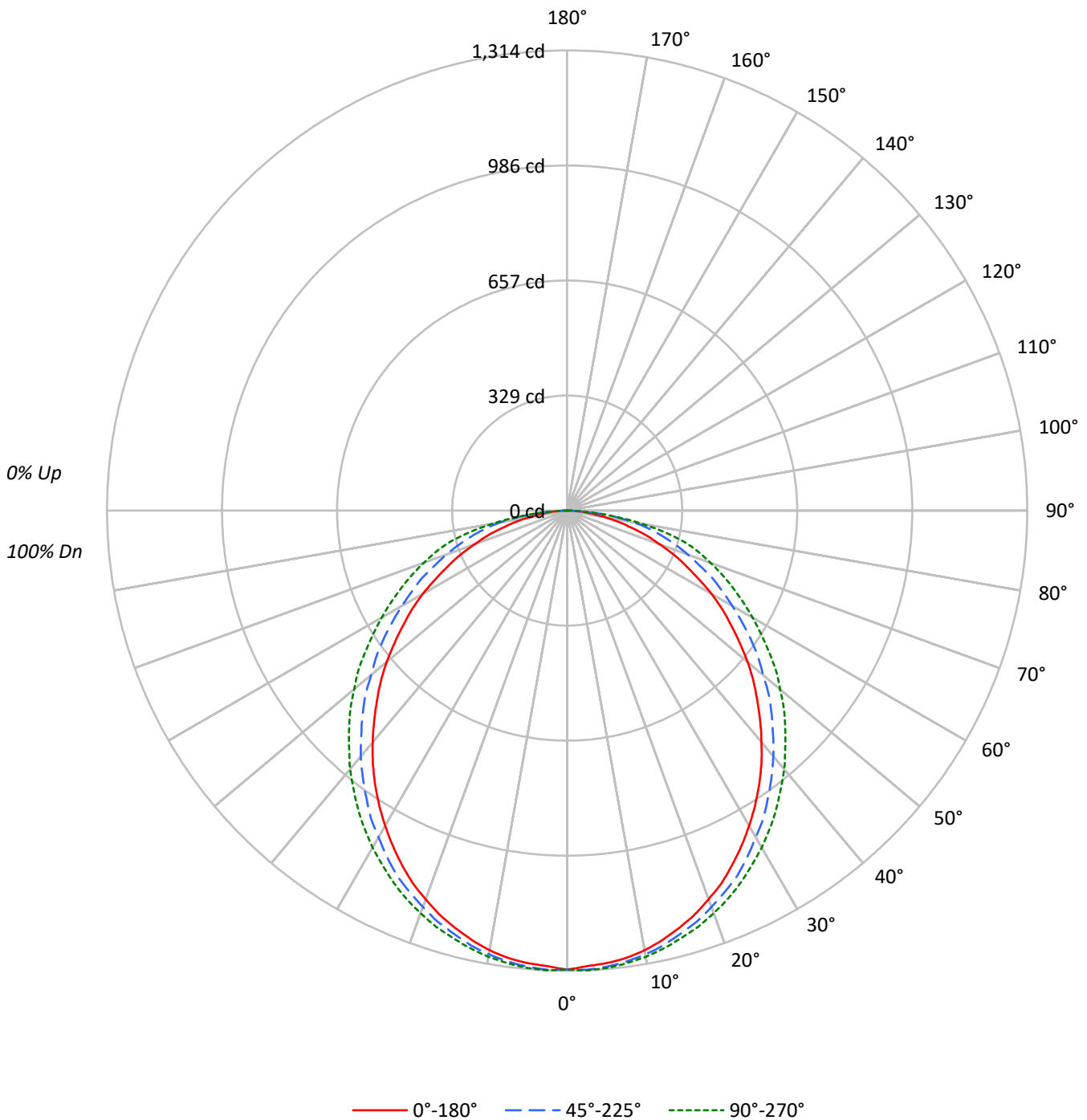
Input Watts (W): 30.039
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	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	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3527	3527	3527
5°	3504	3532	3541
10°	3484	3516	3535
15°	3438	3485	3519
20°	3382	3451	3504
25°	3314	3415	3481
30°	3230	3347	3452
35°	3140	3285	3420
40°	3034	3220	3387
45°	2923	3144	3352
50°	2815	3058	3322
55°	2683	3003	3299
60°	2563	2930	3288
65°	2391	2912	3326
70°	2202	2887	3424
75°	1988	2928	3603
80°	1719	3016	3386
85°	1423	2529	2529



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.0	3.4
10°-20°	352.8	9.6
20°-30°	527.8	14.4
30°-40°	625.1	17.1
40°-50°	637.0	17.4
50°-60°	570.9	15.6
60°-70°	447.0	12.2
70°-80°	288.2	7.9
80°-90°	85.2	2.3
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°	1004.5	27.5
0°-40°	1629.6	44.5
0°-60°	2837.6	77.6
0°-90°	3658.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3658.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1311	1311	1311	1311	1311	
5°	1297	1300	1307	1309	1311	123
15°	1234	1241	1251	1261	1263	348
25°	1116	1126	1150	1166	1172	514
35°	956	968	1000	1031	1041	597
45°	768	785	826	869	881	593
55°	572	590	640	684	703	513
65°	376	398	457	502	522	373
75°	191	220	282	329	346	205
85°	46	63	82	82	82	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1310.8	1310.8	1310.8	1310.8	1310.8
2.5°	1302.2	1305.7	1312.5	1314.2	1314.2
5°	1297.1	1300.5	1307.4	1309.1	1310.8
7.5°	1288.6	1290.3	1298.8	1302.2	1303.9
10°	1274.9	1278.3	1286.9	1292.0	1293.7
12.5°	1256.2	1261.3	1271.5	1278.3	1280.1
15°	1234.0	1240.8	1251.0	1261.3	1263.0
17.5°	1210.1	1216.9	1230.6	1242.5	1245.9
20°	1181.1	1189.6	1205.0	1218.6	1223.7
22.5°	1152.0	1158.9	1177.6	1194.7	1199.8
25°	1116.2	1126.4	1150.3	1165.7	1172.5
27.5°	1078.7	1090.6	1114.5	1135.0	1141.8
30°	1039.4	1051.4	1077.0	1102.6	1111.1
32.5°	998.4	1012.1	1042.8	1068.4	1077.0
35°	955.8	967.7	1000.1	1030.9	1041.1
37.5°	911.4	921.6	959.2	991.6	1001.9
40°	863.6	877.3	916.5	954.1	964.3
42.5°	815.8	831.2	870.4	911.4	921.6
45°	768.0	785.1	826.1	868.7	880.7
47.5°	722.0	735.6	781.7	822.6	839.7
50°	672.5	686.1	730.5	776.6	793.6
52.5°	621.3	640.0	687.8	732.2	752.7
55°	571.8	590.5	640.0	684.4	703.2
57.5°	525.7	541.0	592.2	638.3	657.1
60°	476.2	489.8	544.4	593.9	611.0
62.5°	423.3	443.8	500.1	546.2	566.6
65°	375.5	397.7	457.4	501.8	522.3
67.5°	331.1	351.6	409.6	457.4	479.6
70°	279.9	307.2	366.9	414.7	435.2
72.5°	238.9	262.8	324.3	372.1	394.3
75°	191.2	220.2	281.6	329.4	346.5
77.5°	151.9	180.9	238.9	276.5	285.0
80°	110.9	140.0	194.6	213.3	218.5
82.5°	75.1	102.4	140.0	145.1	146.8
85°	46.1	63.1	81.9	81.9	81.9
87.5°	22.2	25.6	29.0	27.3	27.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)