

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: P277211

Luminaire Tested: **22CZ2-44HE-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277211
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44HE-UNV-L93050-W2A1-U-5000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3846.0 lumens
Efficiency: N/A
Efficacy: 106.7 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

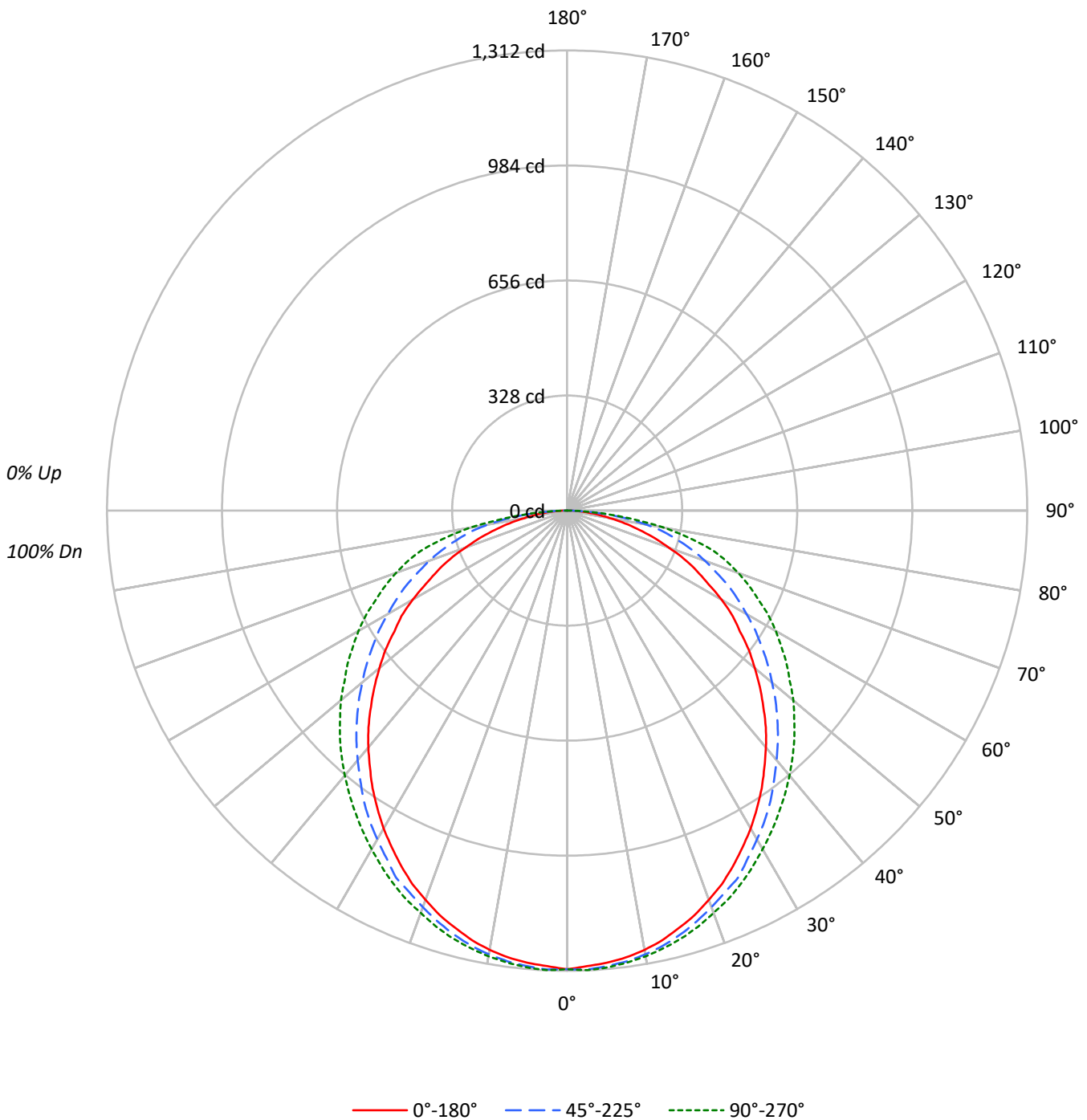
Input Watts (W): 36.049032
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3519	3519	3519
5°	3497	3522	3532
10°	3475	3511	3527
15°	3432	3485	3517
20°	3382	3447	3496
25°	3321	3428	3484
30°	3252	3364	3464
35°	3177	3320	3457
40°	3098	3264	3464
45°	3011	3226	3486
50°	2923	3193	3526
55°	2823	3179	3587
60°	2740	3178	3697
65°	2603	3230	3832
70°	2427	3290	4080
75°	2224	3404	4407
80°	1936	3549	4341
85°	1695	3155	3449



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.7	3.2
10°-20°	352.3	9.2
20°-30°	528.8	13.7
30°-40°	631.9	16.4
40°-50°	657.1	17.1
50°-60°	609.0	15.8
60°-70°	499.5	13.0
70°-80°	337.7	8.8
80°-90°	106.1	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°	1004.7	26.1
0°-40°	1636.6	42.6
0°-60°	2902.7	75.5
0°-90°	3846.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3846.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1308	1308	1308	1308	1308	
5°	1294	1296	1304	1306	1308	123
15°	1232	1238	1251	1258	1262	348
25°	1118	1128	1154	1168	1173	515
35°	967	980	1011	1041	1052	604
45°	791	806	848	897	916	611
55°	602	621	678	738	765	541
65°	409	432	507	573	602	404
75°	214	250	327	394	424	227
85°	55	76	102	114	112	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1307.7	1307.7	1307.7	1307.7	1307.7
2.5°	1300.1	1303.9	1309.6	1311.5	1311.5
5°	1294.5	1296.4	1303.9	1305.8	1307.7
7.5°	1285.0	1288.8	1296.4	1298.2	1300.1
10°	1271.8	1275.5	1285.0	1288.8	1290.7
12.5°	1254.7	1258.5	1269.9	1275.5	1277.4
15°	1232.0	1237.7	1250.9	1258.5	1262.3
17.5°	1209.3	1215.0	1228.2	1239.6	1243.4
20°	1180.9	1194.2	1203.6	1218.8	1220.7
22.5°	1152.5	1160.1	1177.1	1192.3	1199.8
25°	1118.5	1127.9	1154.4	1167.7	1173.3
27.5°	1082.5	1095.8	1116.6	1137.4	1145.0
30°	1046.5	1056.0	1082.5	1107.1	1114.7
32.5°	1006.8	1020.1	1048.4	1073.0	1084.4
35°	967.1	980.3	1010.6	1040.9	1052.2
37.5°	923.5	938.7	969.0	1004.9	1020.1
40°	881.9	893.3	929.2	972.7	986.0
42.5°	838.4	851.6	889.5	936.8	951.9
45°	791.1	806.2	847.8	897.0	916.0
47.5°	745.6	760.8	806.2	855.4	878.1
50°	698.3	717.3	762.7	819.4	842.2
52.5°	652.9	669.9	721.0	779.7	800.5
55°	601.8	620.7	677.5	738.1	764.6
57.5°	560.2	573.4	635.9	698.3	724.8
60°	509.1	526.1	590.5	656.7	687.0
62.5°	454.2	482.6	548.8	617.0	647.2
65°	408.8	431.5	507.2	573.4	601.8
67.5°	361.5	386.1	459.9	529.9	562.1
70°	308.5	340.6	418.2	488.3	518.5
72.5°	261.2	295.2	374.7	442.8	475.0
75°	213.9	249.8	327.4	393.6	423.9
77.5°	168.4	208.2	283.9	335.0	353.9
80°	124.9	162.8	229.0	264.9	280.1
82.5°	87.1	119.2	168.4	187.4	191.1
85°	54.9	75.7	102.2	113.5	111.7
87.5°	24.6	30.3	37.8	41.6	39.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)