

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: P277180

Luminaire Tested: **22CZ2-44HE-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277180
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-L83050-W2A1-U-4500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4365.0 lumens
Efficiency: N/A
Efficacy: 120.3 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

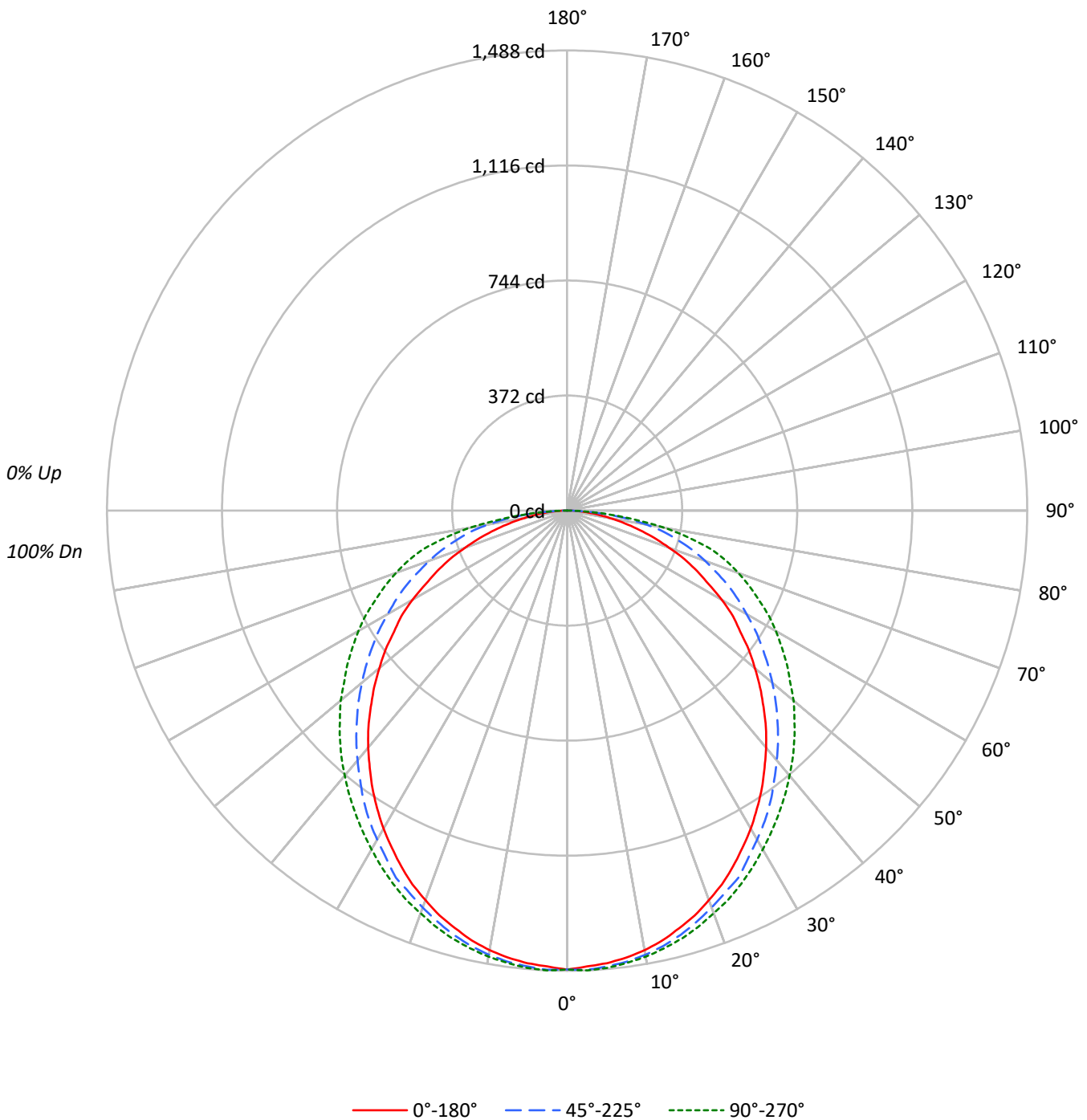
Input Watts (W): 36.27
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3994	3994	3994
5°	3968	3998	4009
10°	3944	3985	4003
15°	3896	3955	3991
20°	3838	3912	3967
25°	3769	3890	3954
30°	3691	3818	3931
35°	3606	3768	3923
40°	3516	3705	3931
45°	3417	3662	3956
50°	3318	3624	4001
55°	3204	3607	4071
60°	3110	3606	4196
65°	2954	3665	4349
70°	2755	3735	4630
75°	2523	3864	5002
80°	2197	4028	4926
85°	1924	3582	3912



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.4	3.2
10°-20°	399.8	9.2
20°-30°	600.2	13.7
30°-40°	717.1	16.4
40°-50°	745.7	17.1
50°-60°	691.2	15.8
60°-70°	566.9	13.0
70°-80°	383.3	8.8
80°-90°	120.4	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°	1140.3	26.1
0°-40°	1857.5	42.6
0°-60°	3294.4	75.5
0°-90°	4365.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4365.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1484	1484	1484	1484	1484	
5°	1469	1471	1480	1482	1484	139
15°	1398	1405	1420	1428	1433	394
25°	1269	1280	1310	1325	1332	585
35°	1098	1113	1147	1181	1194	686
45°	898	915	962	1018	1040	693
55°	683	704	769	838	868	614
65°	464	490	576	651	683	459
75°	243	284	372	447	481	257
85°	62	86	116	129	127	71
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1484.2	1484.2	1484.2	1484.2	1484.2
2.5°	1475.6	1479.9	1486.3	1488.5	1488.5
5°	1469.1	1471.3	1479.9	1482.0	1484.2
7.5°	1458.4	1462.7	1471.3	1473.4	1475.6
10°	1443.4	1447.7	1458.4	1462.7	1464.8
12.5°	1424.0	1428.3	1441.2	1447.7	1449.8
15°	1398.3	1404.7	1419.7	1428.3	1432.6
17.5°	1372.5	1378.9	1394.0	1406.9	1411.2
20°	1340.3	1355.3	1366.0	1383.2	1385.4
22.5°	1308.1	1316.6	1336.0	1353.2	1361.8
25°	1269.4	1280.1	1310.2	1325.2	1331.7
27.5°	1228.6	1243.6	1267.2	1290.9	1299.5
30°	1187.8	1198.5	1228.6	1256.5	1265.1
32.5°	1142.7	1157.7	1189.9	1217.8	1230.7
35°	1097.6	1112.6	1147.0	1181.3	1194.2
37.5°	1048.2	1065.3	1099.7	1140.5	1157.7
40°	1000.9	1013.8	1054.6	1104.0	1119.0
42.5°	951.5	966.5	1009.5	1063.2	1080.4
45°	897.8	915.0	962.2	1018.1	1039.6
47.5°	846.3	863.4	915.0	970.8	996.6
50°	792.6	814.0	865.6	930.0	955.8
52.5°	741.0	760.3	818.3	884.9	908.6
55°	683.0	704.5	768.9	837.7	867.7
57.5°	635.8	650.8	721.7	792.6	822.6
60°	577.8	597.1	670.1	745.3	779.7
62.5°	515.5	547.7	622.9	700.2	734.6
65°	463.9	489.7	575.6	650.8	683.0
67.5°	410.2	438.2	521.9	601.4	637.9
70°	350.1	386.6	474.7	554.2	588.5
72.5°	296.4	335.1	425.3	502.6	539.1
75°	242.7	283.5	371.6	446.8	481.1
77.5°	191.2	236.3	322.2	380.2	401.7
80°	141.8	184.7	259.9	300.7	317.9
82.5°	98.8	135.3	191.2	212.6	216.9
85°	62.3	85.9	116.0	128.9	126.7
87.5°	27.9	34.4	43.0	47.3	45.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)