

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: P277347

Luminaire Tested: **22CZ2-44HE-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277347
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: 22CZ2-44HE-S-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4560.0 lumens
Efficiency: N/A
Efficacy: 128.7 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

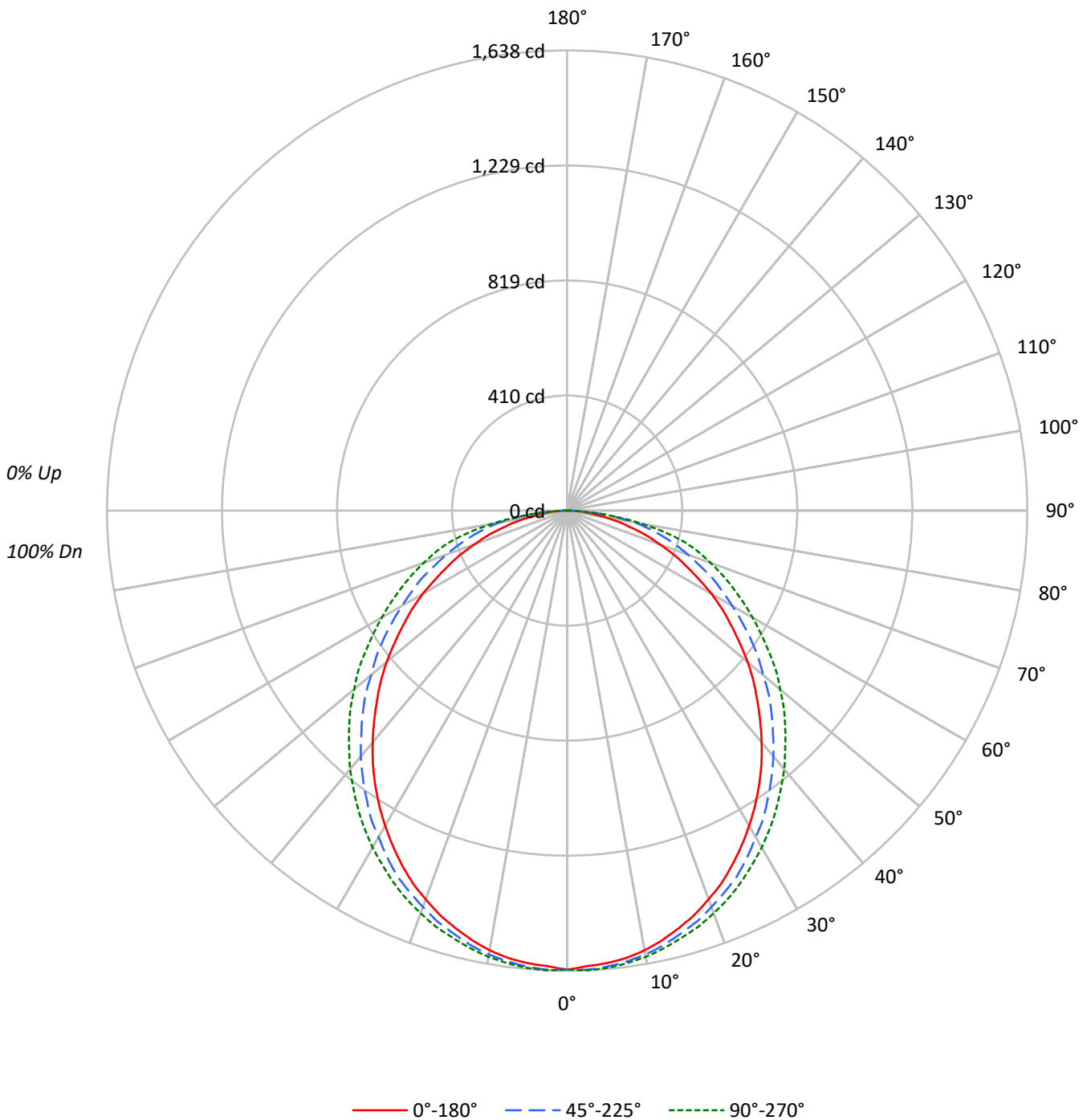
Input Watts (W): 35.433
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P277347

CATALOG NUMBER: 22CZ2-44HE-S-UNV-L83050-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P277347

CATALOG NUMBER: 22CZ2-44HE-S-UNV-L83050-W2A1-U-4000K

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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4397	4397	4397
5°	4368	4402	4414
10°	4343	4383	4407
15°	4285	4345	4386
20°	4216	4302	4369
25°	4131	4258	4340
30°	4026	4172	4304
35°	3914	4096	4263
40°	3782	4013	4223
45°	3643	3919	4178
50°	3509	3812	4142
55°	3344	3743	4113
60°	3195	3653	4099
65°	2981	3631	4145
70°	2745	3599	4268
75°	2478	3650	4491
80°	2143	3758	4220
85°	1772	3152	3152



TEST NUMBER: P277347

CATALOG NUMBER: 22CZ2-44HE-S-UNV-L83050-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.5	3.4
10°-20°	439.7	9.6
20°-30°	658.0	14.4
30°-40°	779.2	17.1
40°-50°	794.1	17.4
50°-60°	711.7	15.6
60°-70°	557.2	12.2
70°-80°	359.3	7.9
80°-90°	106.1	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°	1252.2	27.5
0°-40°	2031.4	44.5
0°-60°	3537.3	77.6
0°-90°	4560.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4560.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1634	1634	1634	1634	1634	
5°	1617	1621	1630	1632	1634	154
15°	1538	1547	1560	1572	1574	434
25°	1391	1404	1434	1453	1462	641
35°	1192	1206	1247	1285	1298	745
45°	957	979	1030	1083	1098	739
55°	713	736	798	853	877	639
65°	468	496	570	626	651	465
75°	238	274	351	411	432	256
85°	57	79	102	102	102	67
90°	0	0	0	0	0	



TEST NUMBER: P277347

CATALOG NUMBER: 22CZ2-44HE-S-UNV-L83050-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1634.0	1634.0	1634.0	1634.0	1634.0
2.5°	1623.4	1627.6	1636.1	1638.2	1638.2
5°	1617.0	1621.2	1629.7	1631.9	1634.0
7.5°	1606.3	1608.5	1619.1	1623.4	1625.5
10°	1589.3	1593.6	1604.2	1610.6	1612.7
12.5°	1565.9	1572.3	1585.1	1593.6	1595.7
15°	1538.2	1546.8	1559.5	1572.3	1574.4
17.5°	1508.5	1517.0	1534.0	1548.9	1553.1
20°	1472.3	1482.9	1502.1	1519.1	1525.5
22.5°	1436.1	1444.6	1468.0	1489.3	1495.7
25°	1391.4	1404.2	1434.0	1453.1	1461.7
27.5°	1344.6	1359.5	1389.3	1414.8	1423.4
30°	1295.7	1310.6	1342.5	1374.4	1385.1
32.5°	1244.6	1261.7	1300.0	1331.9	1342.5
35°	1191.5	1206.3	1246.8	1285.1	1297.8
37.5°	1136.1	1148.9	1195.7	1236.1	1248.9
40°	1076.6	1093.6	1142.5	1189.3	1202.1
42.5°	1017.0	1036.1	1085.1	1136.1	1148.9
45°	957.4	978.7	1029.8	1082.9	1097.8
47.5°	900.0	917.0	974.4	1025.5	1046.8
50°	838.3	855.3	910.6	968.1	989.3
52.5°	774.4	797.8	857.4	912.7	938.3
55°	712.7	736.1	797.8	853.2	876.6
57.5°	655.3	674.4	738.3	795.7	819.1
60°	593.6	610.6	678.7	740.4	761.7
62.5°	527.6	553.2	623.4	680.8	706.4
65°	468.1	495.7	570.2	625.5	651.0
67.5°	412.8	438.3	510.6	570.2	597.9
70°	348.9	383.0	457.4	517.0	542.5
72.5°	297.9	327.6	404.2	463.8	491.5
75°	238.3	274.5	351.1	410.6	431.9
77.5°	189.4	225.5	297.9	344.7	355.3
80°	138.3	174.5	242.5	265.9	272.3
82.5°	93.6	127.7	174.5	180.8	183.0
85°	57.4	78.7	102.1	102.1	102.1
87.5°	27.7	31.9	36.2	34.0	34.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)