

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: P275613

Luminaire Tested: **14CZ2-44-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275613
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-44-S-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3989.0 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

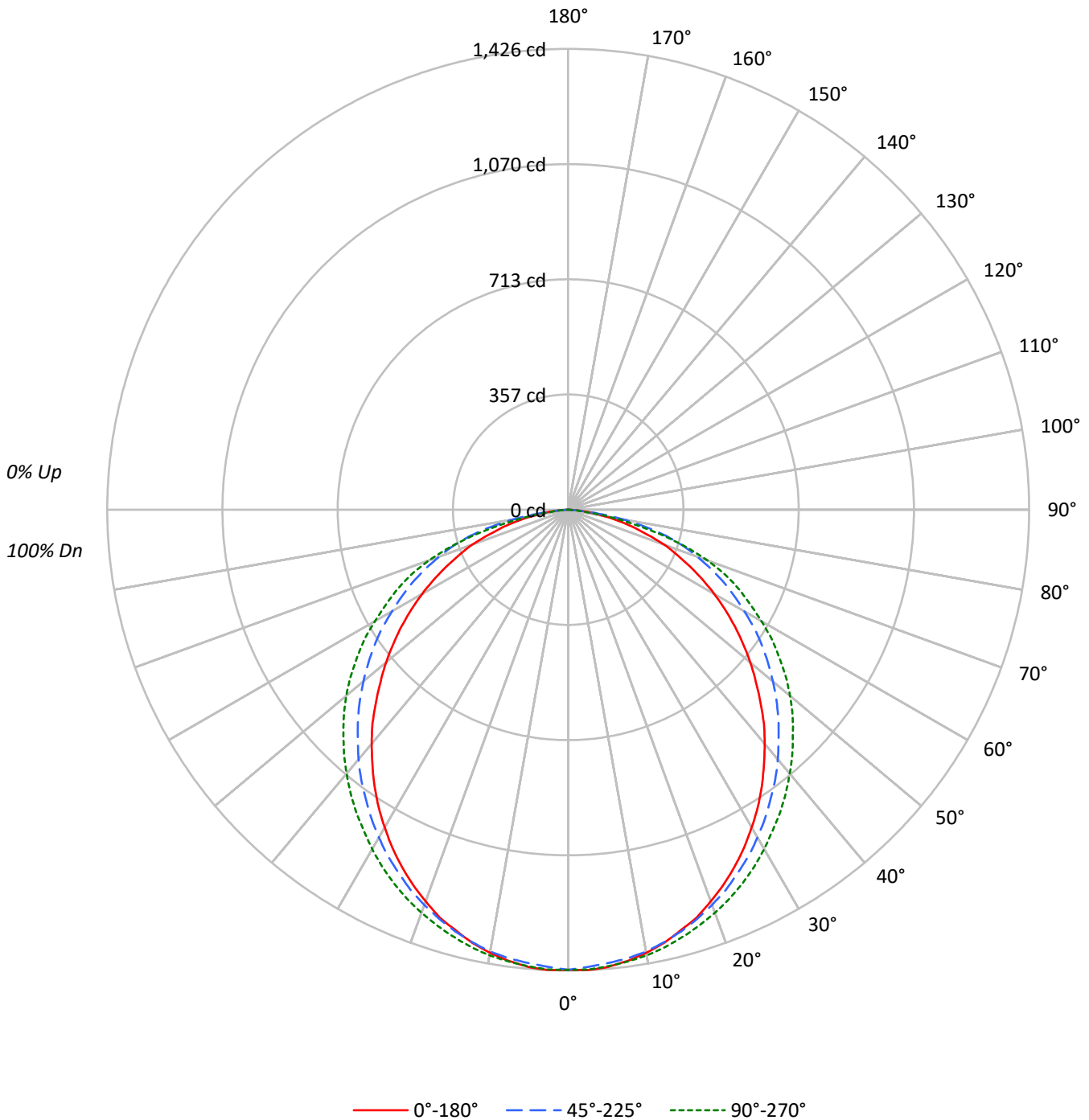
Input Watts (W): 36.549
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P275613

CATALOG NUMBER: 14CZ2-44-S-UNV-L93050-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P275613

CATALOG NUMBER: 14CZ2-44-S-UNV-L93050-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	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84					84			
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70					70			
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58					58			
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50					50			
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	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	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3832	3832	3832
5°	3836	3804	3831
10°	3805	3794	3826
15°	3752	3763	3813
20°	3693	3727	3800
25°	3617	3682	3788
30°	3527	3638	3767
35°	3431	3586	3756
40°	3321	3543	3745
45°	3199	3500	3741
50°	3080	3461	3751
55°	2951	3433	3739
60°	2810	3385	3715
65°	2644	3375	3715
70°	2489	3345	3610
75°	2159	3270	3085
80°	1746	2636	2053
85°	1161	917	611



TEST NUMBER: P275613

CATALOG NUMBER: 14CZ2-44-S-UNV-L93050-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.5	3.4
10°-20°	382.6	9.6
20°-30°	574.0	14.4
30°-40°	684.7	17.2
40°-50°	707.8	17.7
50°-60°	646.2	16.2
60°-70°	508.6	12.7
70°-80°	296.0	7.4
80°-90°	54.5	1.4
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°	1091.1	27.4
0°-40°	1775.8	44.5
0°-60°	3129.8	78.5
0°-90°	3989.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3989.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1424	1424	1424	1424	1424	
5°	1420	1416	1408	1420	1418	135
15°	1347	1349	1351	1369	1369	380
25°	1218	1224	1240	1270	1276	561
35°	1044	1058	1092	1133	1143	653
45°	841	868	920	971	983	649
55°	629	663	732	785	797	562
65°	415	459	530	572	583	412
75°	208	257	314	308	297	221
85°	38	53	30	24	20	49
90°	0	0	0	0	0	



TEST NUMBER: P275613

CATALOG NUMBER: 14CZ2-44-S-UNV-L93050-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1424.0	1424.0	1424.0	1424.0	1424.0
2.5°	1426.0	1422.0	1416.1	1426.0	1424.0
5°	1420.1	1416.1	1408.2	1420.1	1418.1
7.5°	1408.2	1404.2	1400.3	1412.1	1410.2
10°	1392.4	1390.4	1388.4	1402.3	1400.3
12.5°	1372.6	1372.6	1370.6	1386.4	1386.4
15°	1346.9	1348.9	1350.8	1368.6	1368.6
17.5°	1323.1	1321.2	1327.1	1346.9	1348.9
20°	1289.5	1293.5	1301.4	1325.1	1327.1
22.5°	1255.9	1259.9	1273.7	1297.4	1303.4
25°	1218.3	1224.3	1240.1	1269.7	1275.7
27.5°	1178.8	1186.7	1208.4	1240.1	1246.0
30°	1135.2	1147.1	1170.9	1206.5	1212.4
32.5°	1091.7	1103.6	1133.3	1168.9	1176.8
35°	1044.3	1058.1	1091.7	1133.3	1143.2
37.5°	994.8	1012.6	1052.2	1093.7	1105.6
40°	945.4	965.2	1008.7	1052.2	1066.0
42.5°	895.9	915.7	963.2	1012.6	1026.5
45°	840.6	868.2	919.7	971.1	983.0
47.5°	787.2	816.8	874.2	925.6	941.4
50°	735.7	765.4	826.7	880.1	895.9
52.5°	682.3	714.0	779.2	834.6	848.5
55°	628.9	662.6	731.8	785.2	797.0
57.5°	575.5	611.1	682.3	733.8	747.6
60°	522.1	559.7	628.9	680.4	690.2
62.5°	468.7	508.3	579.5	625.0	634.9
65°	415.3	458.8	530.0	571.6	583.4
67.5°	363.9	407.4	476.6	516.2	526.1
70°	316.4	356.0	425.2	454.9	458.8
72.5°	257.1	306.6	373.8	389.6	379.7
75°	207.7	257.1	314.5	308.5	296.7
77.5°	158.2	207.7	245.2	225.5	209.6
80°	112.7	162.2	170.1	140.4	132.5
82.5°	73.2	112.7	94.9	73.2	59.3
85°	37.6	53.4	29.7	23.7	19.8
87.5°	11.9	7.9	4.0	4.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)