

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: P276585

Luminaire Tested: **24CZ2-45-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276585
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45-S-UNV-L82765-W2A1-U-5500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4684.7 lumens
Efficiency: N/A
Efficacy: 130.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

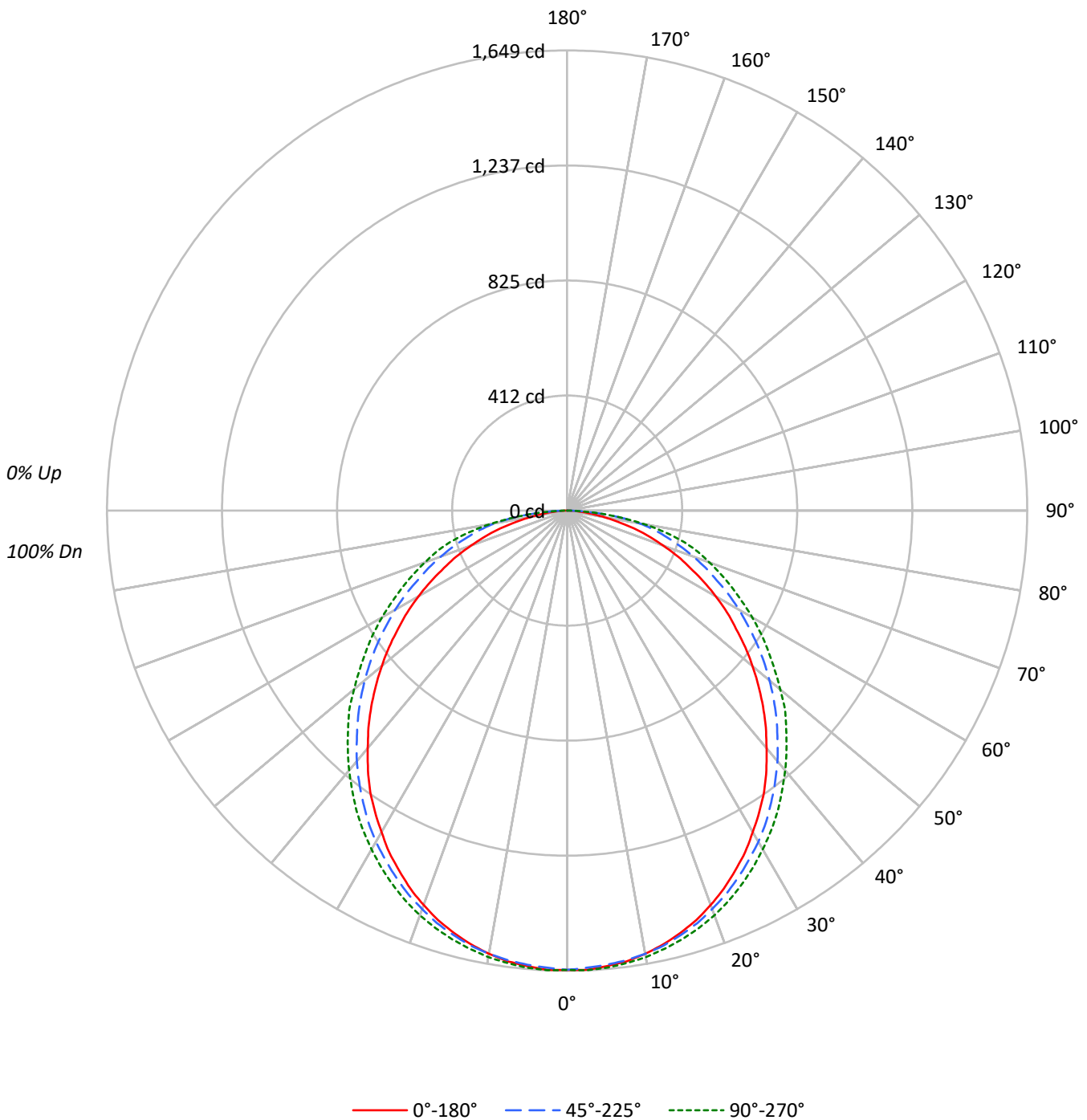
Input Watts (W): 35.991
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2214	2214	2214
5°	2213	2207	2221
10°	2204	2204	2220
15°	2183	2193	2216
20°	2154	2175	2209
25°	2114	2154	2196
30°	2067	2129	2178
35°	2021	2095	2161
40°	1952	2060	2135
45°	1889	2019	2112
50°	1816	1981	2087
55°	1735	1944	2066
60°	1654	1914	2062
65°	1549	1881	2075
70°	1434	1891	2131
75°	1284	1926	2251
80°	1038	2041	2202
85°	781	1792	1746



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.8	3.3
10°-20°	445.2	9.5
20°-30°	669.2	14.3
30°-40°	797.2	17.0
40°-50°	815.8	17.4
50°-60°	734.5	15.7
60°-70°	576.8	12.3
70°-80°	374.4	8.0
80°-90°	115.8	2.5
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°	1270.2	27.1
0°-40°	2067.4	44.1
0°-60°	3617.7	77.2
0°-90°	4684.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4684.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1646	1646	1646	1646	1646	
5°	1638	1641	1634	1643	1644	156
15°	1567	1571	1574	1588	1591	442
25°	1424	1436	1451	1475	1479	656
35°	1231	1246	1275	1306	1315	768
45°	992	1016	1061	1101	1110	765
55°	740	772	829	872	881	663
65°	487	524	591	640	652	484
75°	247	295	370	421	433	261
85°	51	94	116	113	113	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1645.8	1645.8	1645.8	1645.8	1645.8
2.5°	1647.3	1647.3	1639.8	1647.3	1648.7
5°	1638.3	1641.3	1633.9	1642.8	1644.3
7.5°	1629.4	1629.4	1624.9	1633.9	1635.3
10°	1613.0	1614.5	1613.0	1623.4	1624.9
12.5°	1592.2	1595.2	1596.7	1607.1	1608.6
15°	1566.9	1571.4	1574.3	1587.7	1590.7
17.5°	1538.6	1543.1	1550.5	1565.4	1568.4
20°	1504.4	1510.4	1519.3	1538.6	1543.1
22.5°	1467.2	1473.2	1488.0	1505.9	1513.3
25°	1424.0	1436.0	1450.8	1474.6	1479.1
27.5°	1380.9	1391.3	1410.7	1436.0	1441.9
30°	1330.3	1346.7	1370.5	1395.8	1401.7
32.5°	1281.2	1297.6	1325.8	1352.6	1360.1
35°	1230.6	1245.5	1275.2	1306.5	1315.4
37.5°	1172.6	1191.9	1224.7	1255.9	1264.8
40°	1111.6	1135.4	1172.6	1205.3	1215.7
42.5°	1053.5	1078.8	1116.0	1151.7	1163.6
45°	992.5	1016.3	1061.0	1101.1	1110.1
47.5°	930.0	956.8	1004.4	1044.6	1059.5
50°	867.5	895.8	946.4	988.1	997.0
52.5°	805.0	834.8	888.4	933.0	937.5
55°	739.6	772.3	828.8	872.0	880.9
57.5°	680.0	708.3	769.3	814.0	824.4
60°	614.6	645.8	711.3	752.9	766.3
62.5°	552.1	584.8	653.2	694.9	706.8
65°	486.6	523.8	590.7	639.9	651.8
67.5°	430.0	465.8	537.2	584.8	596.7
70°	364.6	404.7	480.6	529.7	541.6
72.5°	308.0	349.7	425.6	473.2	491.1
75°	247.0	294.6	370.5	421.1	433.0
77.5°	187.5	242.5	319.9	358.6	358.6
80°	133.9	192.0	263.4	281.2	284.2
82.5°	87.8	144.3	194.9	193.4	193.4
85°	50.6	93.7	116.1	113.1	113.1
87.5°	19.3	38.7	41.7	41.7	40.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)