

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: P276378

Luminaire Tested: **24CZ2-45-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276378
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-L83050-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4505.0 lumens
Efficiency: N/A
Efficacy: 128.8 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

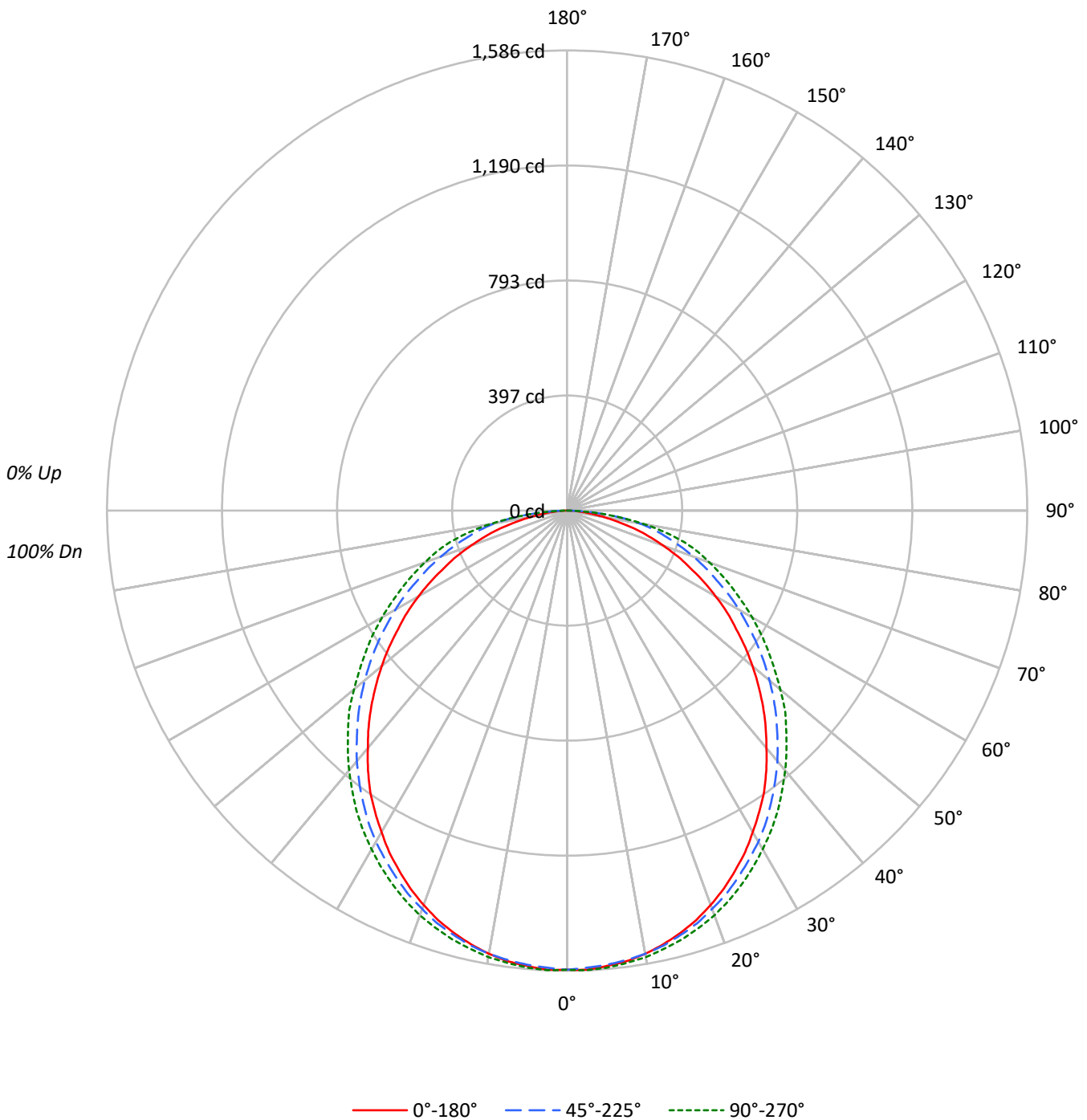
Input Watts (W): 34.968
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P276378

CATALOG NUMBER: 24CZ2-45-S-UNV-L83050-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P276378

CATALOG NUMBER: 24CZ2-45-S-UNV-L83050-W2A1-U-3500K

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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2129	2129	2129
5°	2128	2122	2136
10°	2119	2119	2135
15°	2099	2109	2131
20°	2071	2092	2125
25°	2033	2071	2112
30°	1988	2048	2094
35°	1944	2014	2078
40°	1877	1981	2053
45°	1816	1941	2031
50°	1746	1905	2007
55°	1668	1870	1987
60°	1590	1841	1983
65°	1490	1809	1996
70°	1379	1818	2049
75°	1235	1852	2165
80°	998	1963	2118
85°	752	1723	1680



TEST NUMBER: P276378

CATALOG NUMBER: 24CZ2-45-S-UNV-L83050-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.8	3.3
10°-20°	428.1	9.5
20°-30°	643.6	14.3
30°-40°	766.6	17.0
40°-50°	784.5	17.4
50°-60°	706.3	15.7
60°-70°	554.7	12.3
70°-80°	360.0	8.0
80°-90°	111.4	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°	1221.5	27.1
0°-40°	1988.1	44.1
0°-60°	3478.9	77.2
0°-90°	4505.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4505.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1583	1583	1583	1583	1583	
5°	1576	1578	1571	1580	1581	150
15°	1507	1511	1514	1527	1530	425
25°	1369	1381	1395	1418	1422	631
35°	1183	1198	1226	1256	1265	738
45°	954	977	1020	1059	1068	736
55°	711	743	797	838	847	638
65°	468	504	568	615	627	466
75°	238	283	356	405	416	251
85°	49	90	112	109	109	59
90°	0	0	0	0	0	



TEST NUMBER: P276378

CATALOG NUMBER: 24CZ2-45-S-UNV-L83050-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1582.6	1582.6	1582.6	1582.6	1582.6
2.5°	1584.1	1584.1	1576.9	1584.1	1585.5
5°	1575.5	1578.3	1571.2	1579.8	1581.2
7.5°	1566.9	1566.9	1562.6	1571.2	1572.6
10°	1551.2	1552.6	1551.2	1561.2	1562.6
12.5°	1531.1	1534.0	1535.4	1545.4	1546.9
15°	1506.8	1511.1	1514.0	1526.8	1529.7
17.5°	1479.6	1483.9	1491.1	1505.4	1508.2
20°	1446.7	1452.4	1461.0	1479.6	1483.9
22.5°	1410.9	1416.6	1431.0	1448.1	1455.3
25°	1369.4	1380.9	1395.2	1418.1	1422.4
27.5°	1327.9	1337.9	1356.5	1380.9	1386.6
30°	1279.3	1295.0	1317.9	1342.2	1348.0
32.5°	1232.1	1247.8	1275.0	1300.7	1307.9
35°	1183.4	1197.7	1226.3	1256.4	1265.0
37.5°	1127.6	1146.2	1177.7	1207.7	1216.3
40°	1068.9	1091.8	1127.6	1159.1	1169.1
42.5°	1013.1	1037.4	1073.2	1107.6	1119.0
45°	954.4	977.3	1020.3	1058.9	1067.5
47.5°	894.3	920.1	965.9	1004.5	1018.8
50°	834.2	861.4	910.1	950.2	958.7
52.5°	774.1	802.8	854.3	897.2	901.5
55°	711.2	742.7	797.0	838.5	847.1
57.5°	653.9	681.1	739.8	782.7	792.7
60°	591.0	621.0	684.0	724.1	736.9
62.5°	530.9	562.4	628.2	668.3	679.7
65°	467.9	503.7	568.1	615.3	626.8
67.5°	413.5	447.9	516.6	562.4	573.8
70°	350.6	389.2	462.2	509.4	520.9
72.5°	296.2	336.3	409.3	455.0	472.2
75°	237.5	283.3	356.3	405.0	416.4
77.5°	180.3	233.2	307.7	344.9	344.9
80°	128.8	184.6	253.3	270.5	273.3
82.5°	84.4	138.8	187.5	186.0	186.0
85°	48.7	90.2	111.6	108.8	108.8
87.5°	18.6	37.2	40.1	40.1	38.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)