

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: P276077

Luminaire Tested: **24CZ2-45HE-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276077
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45HE-UNV-L82765-W2A1-U-6500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4434.8 lumens
Efficiency: N/A
Efficacy: 135.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

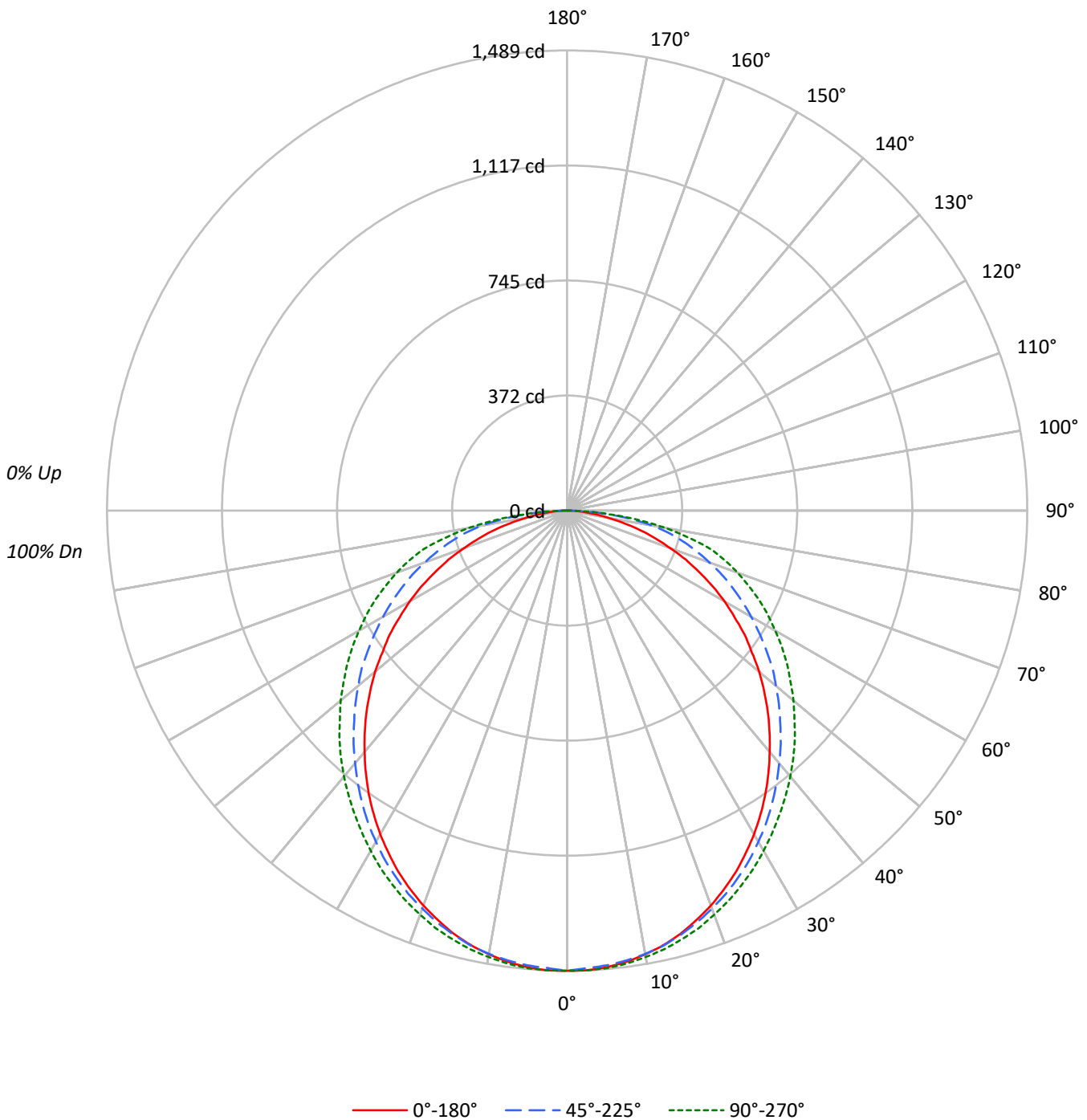
Input Watts (W): 32.829
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2003	2003	2003
5°	2003	1995	2007
10°	1992	1990	2004
15°	1975	1979	2000
20°	1948	1962	1992
25°	1916	1945	1984
30°	1879	1922	1975
35°	1838	1899	1969
40°	1791	1874	1973
45°	1746	1856	1983
50°	1698	1846	2001
55°	1646	1844	2038
60°	1581	1852	2091
65°	1499	1880	2182
70°	1391	1927	2306
75°	1269	2024	2501
80°	1044	2179	2500
85°	800	2010	2147



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.8	3.2
10°-20°	402.0	9.1
20°-30°	605.0	13.6
30°-40°	725.0	16.3
40°-50°	755.6	17.0
50°-60°	703.0	15.9
60°-70°	579.0	13.1
70°-80°	394.3	8.9
80°-90°	130.2	2.9
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°	1147.9	25.9
0°-40°	1872.9	42.2
0°-60°	3331.4	75.1
0°-90°	4434.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4434.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1489	1489	1489	1489	1489	
5°	1483	1483	1477	1484	1486	141
15°	1418	1419	1421	1434	1436	399
25°	1291	1297	1310	1332	1336	594
35°	1119	1132	1156	1187	1199	699
45°	918	937	975	1024	1042	708
55°	702	725	786	848	869	625
65°	471	511	591	660	685	467
75°	244	299	389	459	481	258
85°	52	101	130	139	139	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1489.0	1489.0	1489.0	1489.0	1489.0
2.5°	1489.0	1489.0	1481.6	1489.0	1489.0
5°	1483.1	1483.1	1477.1	1484.5	1486.0
7.5°	1472.7	1474.2	1468.3	1477.1	1478.6
10°	1457.9	1459.4	1456.4	1465.3	1466.8
12.5°	1440.1	1441.6	1441.6	1452.0	1453.5
15°	1417.9	1419.4	1420.9	1434.2	1435.7
17.5°	1389.8	1394.3	1397.2	1413.5	1416.5
20°	1360.2	1364.7	1370.6	1388.3	1391.3
22.5°	1326.2	1332.1	1342.5	1361.7	1366.1
25°	1290.7	1296.6	1309.9	1332.1	1336.5
27.5°	1250.7	1259.6	1275.8	1299.5	1305.5
30°	1209.2	1218.1	1237.4	1262.5	1271.4
32.5°	1164.8	1176.7	1198.9	1227.0	1235.9
35°	1119.0	1132.3	1156.0	1187.0	1198.9
37.5°	1070.1	1084.9	1113.0	1147.1	1161.9
40°	1019.8	1037.6	1067.2	1107.1	1123.4
42.5°	969.5	985.7	1022.8	1065.7	1083.4
45°	917.7	936.9	975.4	1024.2	1042.0
47.5°	864.4	883.6	929.5	981.3	997.6
50°	811.1	830.3	882.1	936.9	956.1
52.5°	753.4	778.5	837.7	892.5	911.7
55°	701.6	725.3	785.9	848.1	868.8
57.5°	642.4	670.5	737.1	802.2	824.4
60°	587.6	617.2	688.2	754.9	777.1
62.5°	531.4	563.9	639.4	707.5	732.7
65°	470.7	510.6	590.6	660.1	685.3
67.5°	415.9	457.4	541.7	612.8	635.0
70°	353.7	404.1	489.9	561.0	586.1
72.5°	300.5	350.8	441.1	510.6	535.8
75°	244.2	299.0	389.3	458.8	481.0
77.5°	188.0	248.7	338.9	392.2	399.6
80°	134.7	198.3	281.2	312.3	322.7
82.5°	94.7	152.5	207.2	227.9	233.9
85°	51.8	100.6	130.2	139.1	139.1
87.5°	22.2	42.9	51.8	53.3	54.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)