

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: P276494

Luminaire Tested: **24CZ2-45HE-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276494
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: 24CZ2-45HE-S-UNV-L82765-W2A1-U-5000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4590.3 lumens
Efficiency: N/A
Efficacy: 142.7 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

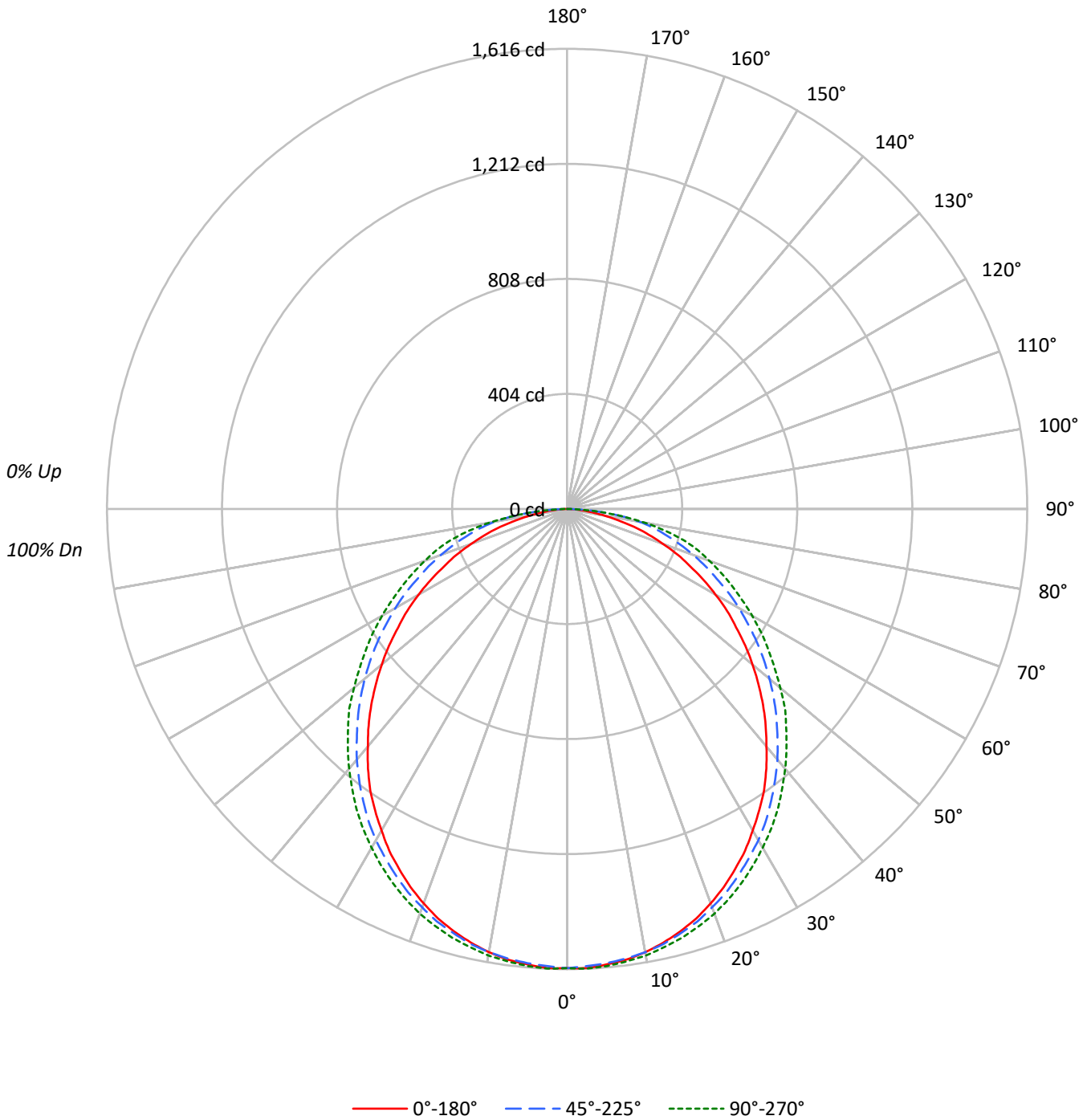
Input Watts (W): 32.178
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2170	2170	2170
5°	2168	2162	2176
10°	2159	2159	2175
15°	2139	2149	2171
20°	2111	2132	2165
25°	2071	2110	2152
30°	2025	2086	2134
35°	1981	2052	2117
40°	1913	2018	2092
45°	1850	1978	2070
50°	1779	1941	2045
55°	1700	1905	2025
60°	1621	1875	2021
65°	1518	1843	2033
70°	1405	1852	2088
75°	1258	1888	2206
80°	1017	2000	2158
85°	766	1755	1711



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.7	3.3
10°-20°	436.2	9.5
20°-30°	655.7	14.3
30°-40°	781.1	17.0
40°-50°	799.4	17.4
50°-60°	719.7	15.7
60°-70°	565.2	12.3
70°-80°	366.8	8.0
80°-90°	113.4	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°	1244.6	27.1
0°-40°	2025.7	44.1
0°-60°	3544.8	77.2
0°-90°	4590.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4590.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1613	1613	1613	1613	1613	
5°	1605	1608	1601	1610	1611	153
15°	1535	1540	1543	1556	1559	433
25°	1395	1407	1422	1445	1449	643
35°	1206	1220	1250	1280	1289	752
45°	972	996	1040	1079	1088	750
55°	725	757	812	854	863	650
65°	477	513	579	627	639	475
75°	242	289	363	413	424	256
85°	50	92	114	111	111	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1612.6	1612.6	1612.6	1612.6	1612.6
2.5°	1614.0	1614.0	1606.8	1614.0	1615.5
5°	1605.3	1608.2	1600.9	1609.7	1611.1
7.5°	1596.6	1596.6	1592.2	1600.9	1602.4
10°	1580.5	1582.0	1580.5	1590.7	1592.2
12.5°	1560.1	1563.0	1564.5	1574.7	1576.1
15°	1535.3	1539.7	1542.6	1555.7	1558.6
17.5°	1507.6	1512.0	1519.3	1533.9	1536.8
20°	1474.1	1479.9	1488.7	1507.6	1512.0
22.5°	1437.6	1443.5	1458.0	1475.5	1482.8
25°	1395.3	1407.0	1421.6	1444.9	1449.3
27.5°	1353.1	1363.3	1382.2	1407.0	1412.8
30°	1303.5	1319.5	1342.9	1367.6	1373.5
32.5°	1255.4	1271.4	1299.1	1325.4	1332.6
35°	1205.8	1220.4	1249.5	1280.2	1288.9
37.5°	1148.9	1167.9	1200.0	1230.6	1239.3
40°	1089.2	1112.5	1148.9	1181.0	1191.2
42.5°	1032.3	1057.1	1093.5	1128.5	1140.2
45°	972.5	995.8	1039.6	1078.9	1087.7
47.5°	911.3	937.5	984.2	1023.5	1038.1
50°	850.0	877.7	927.3	968.1	976.9
52.5°	788.8	818.0	870.4	914.2	918.6
55°	724.6	756.7	812.1	854.4	863.2
57.5°	666.3	694.0	753.8	797.5	807.8
60°	602.2	632.8	696.9	737.8	750.9
62.5°	540.9	573.0	640.1	680.9	692.6
65°	476.8	513.2	578.8	627.0	638.6
67.5°	421.4	456.4	526.4	573.0	584.7
70°	357.2	396.6	470.9	519.1	530.7
72.5°	301.8	342.6	417.0	463.7	481.2
75°	242.0	288.7	363.1	412.6	424.3
77.5°	183.7	237.7	313.5	351.4	351.4
80°	131.2	188.1	258.1	275.6	278.5
82.5°	86.0	141.4	191.0	189.5	189.5
85°	49.6	91.9	113.7	110.8	110.8
87.5°	19.0	37.9	40.8	40.8	39.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)