

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: P260618

Luminaire Tested: **24CZ-LD5-45SE-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260618
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-45SE-UNV-L83050-W2A1-U-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4532.0 lumens
Efficiency: N/A
Efficacy: 129.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

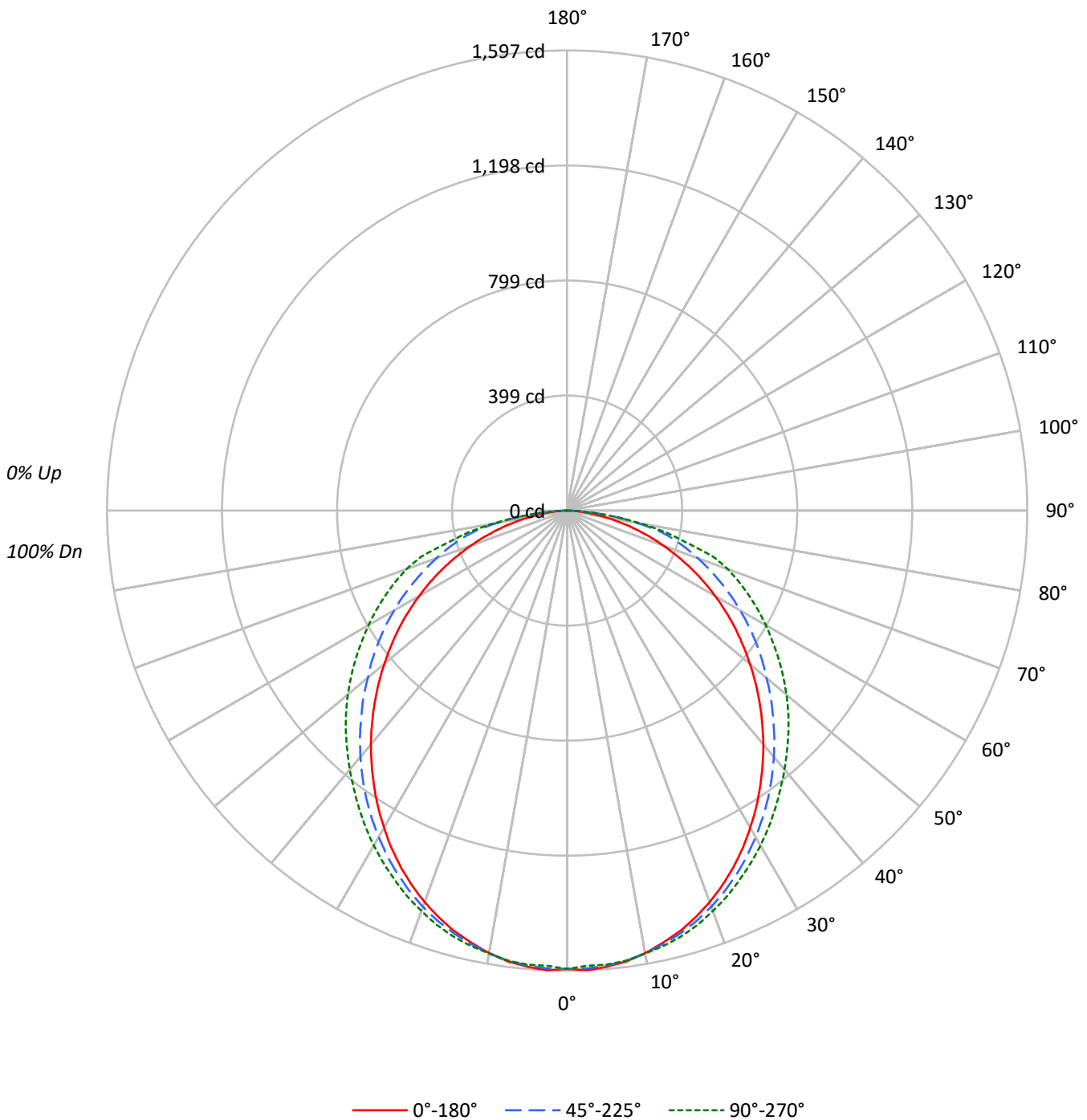
Input Watts (W): 34.968
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2140	2140	2140
5°	2146	2140	2136
10°	2131	2131	2133
15°	2105	2116	2131
20°	2071	2095	2117
25°	2027	2066	2101
30°	1974	2032	2085
35°	1919	1998	2070
40°	1861	1960	2060
45°	1798	1922	2067
50°	1734	1890	2079
55°	1671	1878	2100
60°	1595	1866	2142
65°	1512	1867	2213
70°	1398	1899	2332
75°	1250	1984	2218
80°	1046	1900	2032
85°	790	1462	1389



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.3	3.3
10°-20°	427.8	9.4
20°-30°	639.5	14.1
30°-40°	758.6	16.7
40°-50°	780.8	17.2
50°-60°	716.3	15.8
60°-70°	579.2	12.8
70°-80°	375.9	8.3
80°-90°	103.6	2.3
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°	1217.5	26.9
0°-40°	1976.2	43.6
0°-60°	3473.3	76.6
0°-90°	4532.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4532.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1590	1590	1590	1590	1590	
5°	1589	1578	1584	1583	1581	151
15°	1511	1505	1519	1525	1530	426
25°	1366	1367	1392	1404	1415	629
35°	1168	1178	1216	1243	1260	731
45°	945	960	1010	1058	1086	729
55°	712	734	801	866	895	636
65°	475	503	586	664	695	469
75°	240	286	382	427	427	256
85°	51	87	95	92	90	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1590.5	1590.5	1590.5	1590.5	1590.5
2.5°	1596.7	1584.3	1590.5	1588.9	1581.2
5°	1588.9	1578.1	1584.3	1582.7	1581.2
7.5°	1578.1	1567.2	1575.0	1573.4	1575.0
10°	1559.5	1550.2	1559.5	1561.0	1561.0
12.5°	1536.2	1528.4	1540.8	1543.9	1547.0
15°	1511.4	1505.2	1519.1	1525.3	1530.0
17.5°	1480.3	1475.7	1492.7	1500.5	1506.7
20°	1446.2	1444.6	1463.3	1471.0	1478.8
22.5°	1407.4	1407.4	1429.1	1438.4	1449.3
25°	1365.5	1367.1	1391.9	1404.3	1415.2
27.5°	1320.5	1322.1	1351.5	1367.1	1379.5
30°	1270.8	1277.1	1308.1	1328.3	1342.2
32.5°	1221.2	1228.9	1263.1	1286.4	1301.9
35°	1168.4	1177.7	1216.5	1242.9	1260.0
37.5°	1114.1	1125.0	1166.9	1196.4	1216.5
40°	1059.8	1072.2	1115.7	1149.8	1173.1
42.5°	1002.4	1016.4	1064.5	1104.8	1129.6
45°	945.0	960.5	1010.2	1058.3	1086.2
47.5°	887.6	906.2	959.0	1011.7	1041.2
50°	828.6	847.2	903.1	963.6	993.1
52.5°	769.6	791.4	853.4	915.5	945.0
55°	712.2	734.0	800.7	865.9	895.3
57.5°	653.3	675.0	747.9	816.2	845.7
60°	592.8	617.6	693.6	763.4	796.0
62.5°	533.8	560.2	640.9	715.3	746.4
65°	474.8	502.8	586.5	664.1	695.2
67.5°	414.3	446.9	533.8	612.9	645.5
70°	355.3	391.0	482.6	561.7	592.8
72.5°	297.9	336.7	431.4	512.1	530.7
75°	240.5	285.5	381.7	426.7	426.7
77.5°	186.2	235.9	325.9	342.9	352.2
80°	135.0	189.3	245.2	265.3	262.2
82.5°	90.0	144.3	175.3	175.3	170.7
85°	51.2	86.9	94.7	91.6	90.0
87.5°	21.7	32.6	29.5	23.3	20.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)