

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: P261057

Luminaire Tested: **24CZ-LD5-40-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261057
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-40-S-UNV-L93050-W2A1-U-3000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 90 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3232.2 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

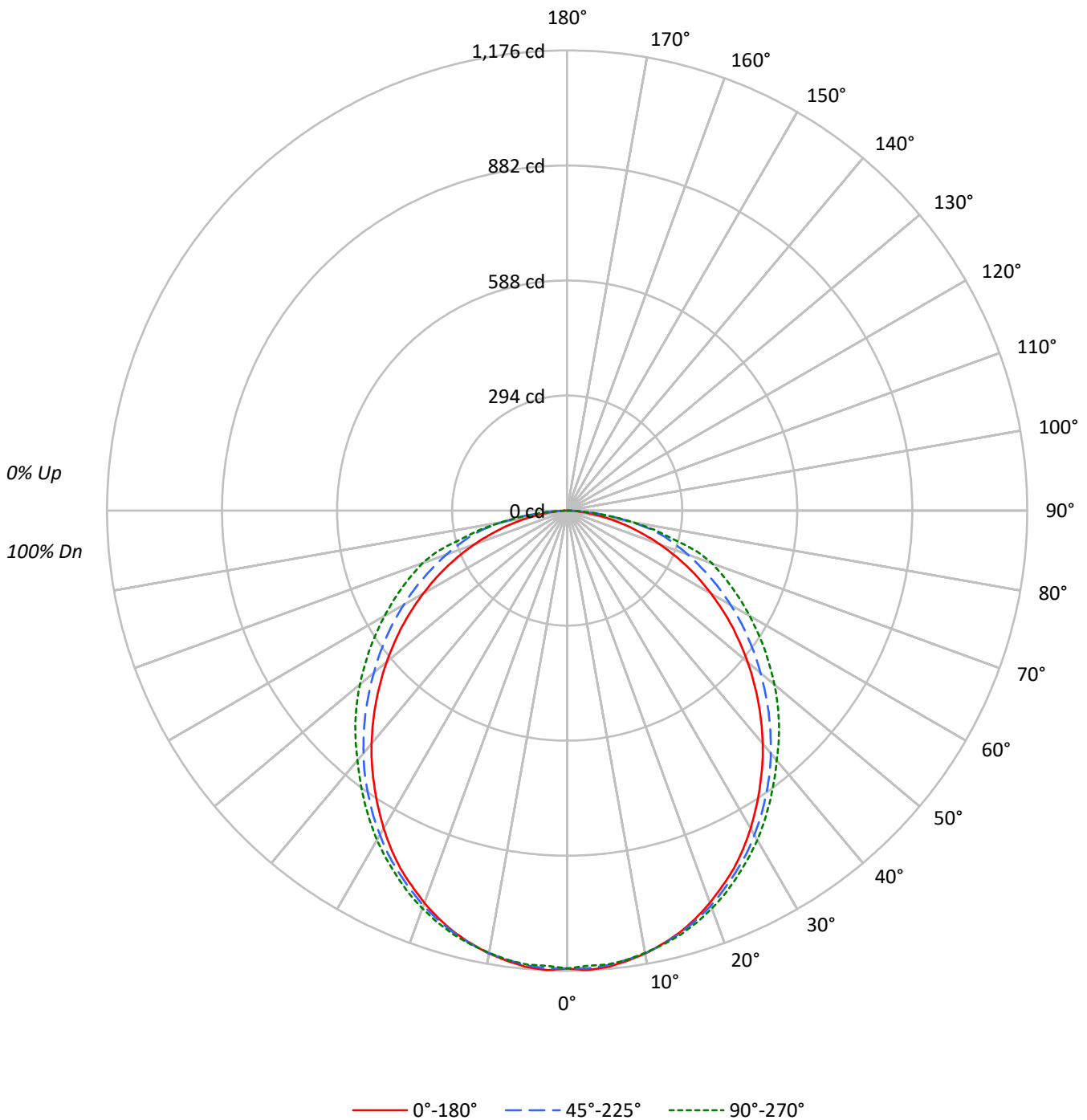
Input Watts (W): 28.922256
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50					50			
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1574	1574	1574
5°	1582	1576	1573
10°	1571	1569	1568
15°	1554	1556	1562
20°	1528	1538	1549
25°	1498	1514	1530
30°	1457	1487	1510
35°	1411	1456	1486
40°	1366	1422	1464
45°	1314	1385	1457
50°	1261	1351	1447
55°	1206	1322	1443
60°	1143	1299	1450
65°	1075	1284	1479
70°	990	1290	1548
75°	878	1336	1443
80°	733	1267	1300
85°	548	1013	929



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.6	3.4
10°-20°	314.6	9.7
20°-30°	468.9	14.5
30°-40°	552.0	17.1
40°-50°	560.9	17.4
50°-60°	504.3	15.6
60°-70°	398.4	12.3
70°-80°	252.7	7.8
80°-90°	69.7	2.2
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°	894.1	27.7
0°-40°	1446.1	44.7
0°-60°	2511.3	77.7
0°-90°	3232.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3232.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1171	1162	1167	1165	1165	111
15°	1115	1110	1117	1121	1122	314
25°	1009	1008	1020	1026	1030	464
35°	859	865	886	896	904	538
45°	690	700	728	750	766	533
55°	514	527	564	600	615	459
65°	338	355	403	447	465	335
75°	169	198	257	280	278	180
85°	36	61	66	60	60	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1170.1	1170.1	1170.1	1170.1	1170.1
2.5°	1175.5	1166.9	1171.2	1169.0	1164.7
5°	1171.2	1161.5	1166.9	1164.7	1164.7
7.5°	1161.5	1154.0	1158.3	1157.2	1158.3
10°	1149.7	1142.1	1148.6	1148.6	1147.5
12.5°	1133.5	1127.1	1134.6	1134.6	1135.7
15°	1115.3	1109.9	1117.4	1120.6	1121.7
17.5°	1092.7	1087.3	1097.0	1100.2	1103.4
20°	1066.9	1064.7	1074.4	1077.6	1081.9
22.5°	1037.8	1037.8	1047.5	1051.8	1058.3
25°	1008.8	1007.7	1019.5	1026.0	1030.3
27.5°	974.4	975.4	990.5	997.0	1002.3
30°	937.8	940.0	957.2	964.7	972.2
32.5°	899.1	903.4	922.7	931.4	938.9
35°	859.3	864.7	886.2	895.9	904.5
37.5°	819.5	827.0	849.6	859.3	869.0
40°	777.6	784.0	809.8	821.7	833.5
42.5°	734.5	743.1	769.0	786.2	800.1
45°	690.4	700.1	728.1	749.6	765.7
47.5°	646.4	659.3	686.1	715.2	729.2
50°	602.3	615.2	645.3	677.5	691.5
52.5°	557.1	570.0	604.4	637.8	652.8
55°	514.1	527.0	563.5	600.1	615.2
57.5°	468.9	482.9	523.8	561.4	576.4
60°	424.8	438.8	482.9	522.7	538.8
62.5°	381.8	396.8	443.1	485.0	501.2
65°	337.7	354.9	403.3	447.4	464.6
67.5°	294.7	314.0	364.6	410.8	429.1
70°	251.7	274.2	328.0	375.3	393.6
72.5°	209.7	234.5	291.5	338.8	348.5
75°	168.8	197.9	257.0	279.6	277.5
77.5°	130.1	162.4	218.3	222.6	229.1
80°	94.6	130.1	163.5	172.1	167.8
82.5°	62.4	97.9	117.2	112.9	111.8
85°	35.5	61.3	65.6	60.2	60.2
87.5°	15.1	24.7	21.5	16.1	15.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)