

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: P260974

Luminaire Tested: **24CZ-LD5-30-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260974
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-LD5-30-S-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3288.0 lumens
Efficiency: N/A
Efficacy: 163.8 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

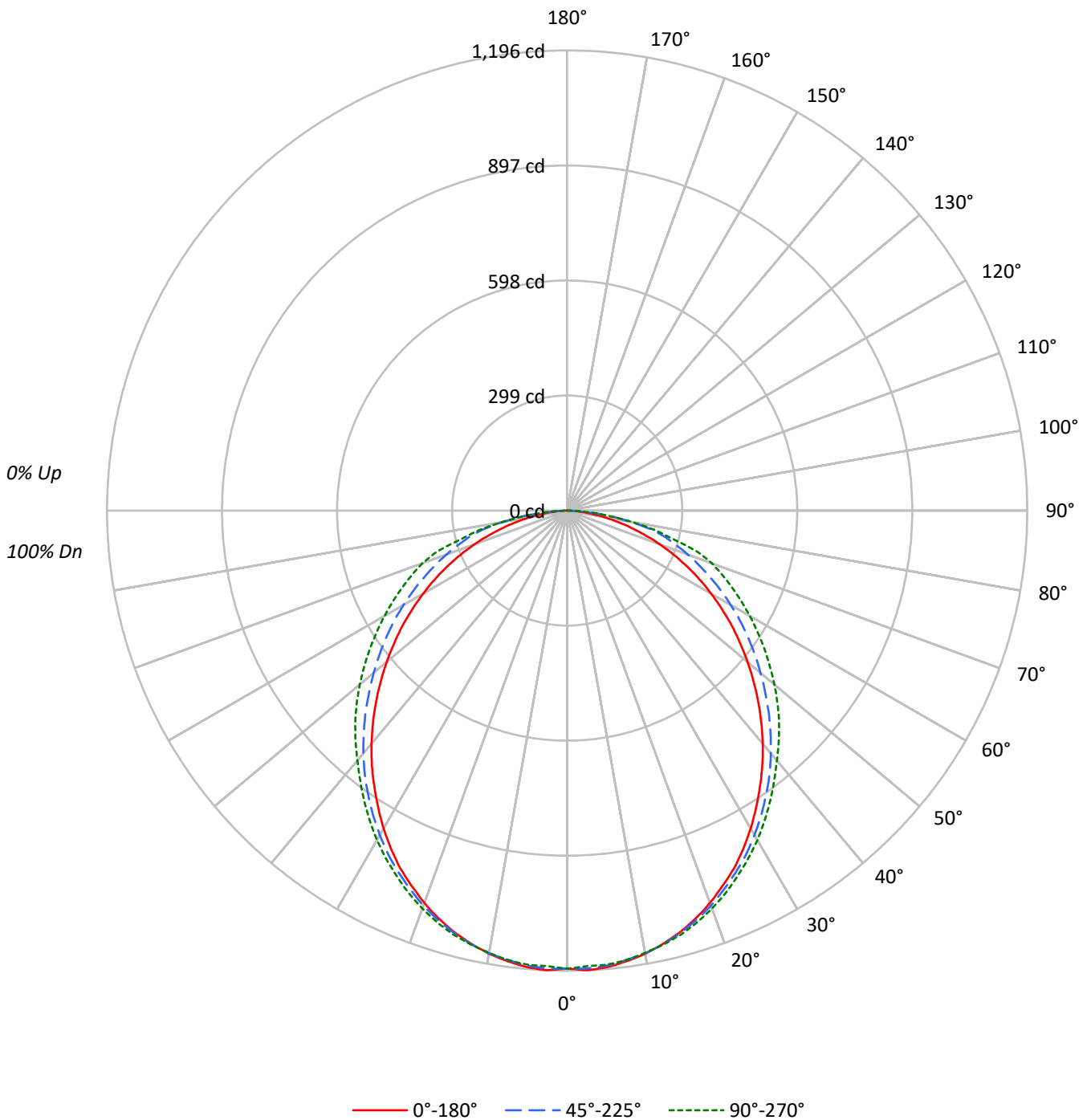
Input Watts (W): 20.074329
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1602	1602	1602
5°	1609	1603	1600
10°	1598	1596	1595
15°	1580	1583	1589
20°	1554	1565	1576
25°	1523	1540	1556
30°	1482	1513	1537
35°	1436	1481	1511
40°	1389	1447	1489
45°	1337	1409	1482
50°	1283	1374	1473
55°	1227	1345	1468
60°	1163	1322	1475
65°	1094	1306	1505
70°	1007	1313	1575
75°	893	1359	1468
80°	746	1289	1323
85°	557	1030	946



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.5	3.4
10°-20°	320.1	9.7
20°-30°	477.0	14.5
30°-40°	561.5	17.1
40°-50°	570.6	17.4
50°-60°	513.0	15.6
60°-70°	405.3	12.3
70°-80°	257.1	7.8
80°-90°	71.0	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°	909.6	27.7
0°-40°	1471.1	44.7
0°-60°	2554.6	77.7
0°-90°	3288.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3288.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1190	1190	1190	1190	1190	
5°	1191	1182	1187	1185	1185	113
15°	1134	1129	1137	1140	1141	320
25°	1026	1025	1037	1044	1048	472
35°	874	880	902	911	920	547
45°	702	712	741	762	779	542
55°	523	536	573	610	626	467
65°	344	361	410	455	473	340
75°	172	201	262	284	282	183
85°	36	62	67	61	61	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1190.3	1190.3	1190.3	1190.3	1190.3
2.5°	1195.8	1187.0	1191.4	1189.2	1184.8
5°	1191.4	1181.6	1187.0	1184.8	1184.8
7.5°	1181.6	1173.9	1178.3	1177.2	1178.3
10°	1169.5	1161.9	1168.4	1168.4	1167.3
12.5°	1153.1	1146.6	1154.2	1154.2	1155.3
15°	1134.5	1129.1	1136.7	1140.0	1141.1
17.5°	1111.5	1106.1	1115.9	1119.2	1122.5
20°	1085.3	1083.1	1092.9	1096.2	1100.6
22.5°	1055.7	1055.7	1065.6	1070.0	1076.5
25°	1026.2	1025.1	1037.2	1043.7	1048.1
27.5°	991.2	992.3	1007.6	1014.2	1019.6
30°	954.0	956.2	973.7	981.4	989.0
32.5°	914.6	919.0	938.7	947.4	955.1
35°	874.1	879.6	901.5	911.3	920.1
37.5°	833.7	841.3	864.3	874.1	884.0
40°	791.0	797.6	823.8	835.8	847.9
42.5°	747.2	756.0	782.2	799.7	814.0
45°	702.4	712.2	740.7	762.5	779.0
47.5°	657.5	670.6	698.0	727.5	741.8
50°	612.7	625.8	656.4	689.2	703.5
52.5°	566.7	579.8	614.9	648.8	664.1
55°	523.0	536.1	573.3	610.5	625.8
57.5°	477.0	491.2	532.8	571.1	586.4
60°	432.1	446.4	491.2	531.7	548.1
62.5°	388.4	403.7	450.7	493.4	509.8
65°	343.5	361.0	410.3	455.1	472.6
67.5°	299.8	319.5	370.9	417.9	436.5
70°	256.0	279.0	333.7	381.8	400.4
72.5°	213.3	238.5	296.5	344.6	354.5
75°	171.8	201.3	261.5	284.5	282.3
77.5°	132.4	165.2	222.1	226.5	233.0
80°	96.3	132.4	166.3	175.0	170.7
82.5°	63.5	99.6	119.3	114.9	113.8
85°	36.1	62.4	66.7	61.3	61.3
87.5°	15.3	25.2	21.9	16.4	15.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)