

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: P261025

Luminaire Tested: **24CZ-LD5-30SE-S-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261025
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-LD5-30SE-S-UNV-L83050-W2A1-U-4500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3279.0 lumens
Efficiency: N/A
Efficacy: 143.6 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

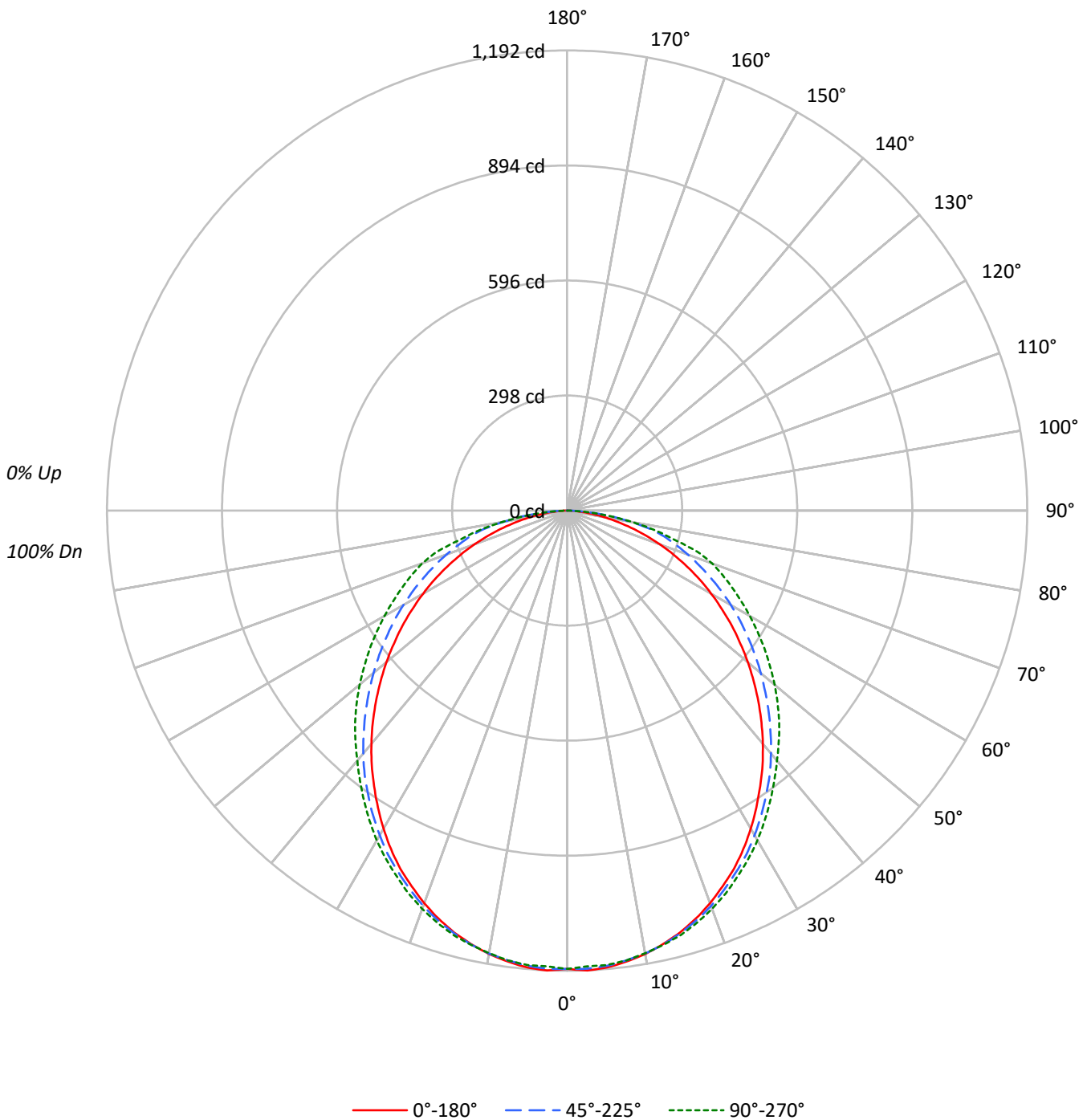
Input Watts (W): 22.828338
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1597	1597	1597
5°	1605	1599	1596
10°	1593	1592	1590
15°	1576	1579	1585
20°	1550	1561	1572
25°	1519	1536	1552
30°	1478	1509	1532
35°	1432	1477	1507
40°	1385	1443	1485
45°	1333	1405	1478
50°	1279	1370	1468
55°	1223	1341	1464
60°	1160	1318	1471
65°	1091	1302	1500
70°	1004	1309	1571
75°	891	1356	1463
80°	744	1285	1319
85°	556	1028	943



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.2	3.4
10°-20°	319.2	9.7
20°-30°	475.7	14.5
30°-40°	559.9	17.1
40°-50°	569.0	17.4
50°-60°	511.6	15.6
60°-70°	404.2	12.3
70°-80°	256.4	7.8
80°-90°	70.8	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°	907.1	27.7
0°-40°	1467.0	44.7
0°-60°	2547.7	77.7
0°-90°	3279.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3279.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1187	1187	1187	1187	1187	
5°	1188	1178	1184	1182	1182	113
15°	1131	1126	1134	1137	1138	319
25°	1023	1022	1034	1041	1045	471
35°	872	877	899	909	918	545
45°	700	710	739	760	777	540
55°	522	535	572	609	624	466
65°	343	360	409	454	471	339
75°	171	201	261	284	282	182
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°	1187.1	1187.1	1187.1	1187.1	1187.1
2.5°	1192.5	1183.8	1188.1	1186.0	1181.6
5°	1188.1	1178.3	1183.8	1181.6	1181.6
7.5°	1178.3	1170.7	1175.1	1174.0	1175.1
10°	1166.3	1158.7	1165.2	1165.2	1164.1
12.5°	1150.0	1143.4	1151.1	1151.1	1152.1
15°	1131.4	1126.0	1133.6	1136.9	1138.0
17.5°	1108.5	1103.0	1112.9	1116.1	1119.4
20°	1082.3	1080.1	1090.0	1093.2	1097.6
22.5°	1052.9	1052.9	1062.7	1067.0	1073.6
25°	1023.4	1022.3	1034.3	1040.9	1045.2
27.5°	988.5	989.6	1004.9	1011.4	1016.9
30°	951.4	953.6	971.0	978.7	986.3
32.5°	912.1	916.5	936.1	944.8	952.5
35°	871.7	877.2	899.0	908.8	917.6
37.5°	831.4	839.0	861.9	871.7	881.6
40°	788.8	795.4	821.6	833.6	845.6
42.5°	745.2	753.9	780.1	797.6	811.7
45°	700.5	710.3	738.6	760.5	776.8
47.5°	655.7	668.8	696.1	725.5	739.7
50°	611.0	624.1	654.6	687.4	701.5
52.5°	565.2	578.3	613.2	647.0	662.3
55°	521.5	534.6	571.7	608.8	624.1
57.5°	475.7	489.9	531.3	569.5	584.8
60°	431.0	445.1	489.9	530.2	546.6
62.5°	387.3	402.6	449.5	492.1	508.4
65°	342.6	360.0	409.1	453.9	471.3
67.5°	298.9	318.6	369.9	416.8	435.3
70°	255.3	278.2	332.8	380.8	399.3
72.5°	212.8	237.8	295.7	343.7	353.5
75°	171.3	200.8	260.8	283.7	281.5
77.5°	132.0	164.7	221.5	225.8	232.4
80°	96.0	132.0	165.8	174.6	170.2
82.5°	63.3	99.3	118.9	114.6	113.5
85°	36.0	62.2	66.6	61.1	61.1
87.5°	15.3	25.1	21.8	16.4	15.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)