

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: P263199

Luminaire Tested: **24CZ-LD5-30SE-SQP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P263199
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-30SE-SQP-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1843.2 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

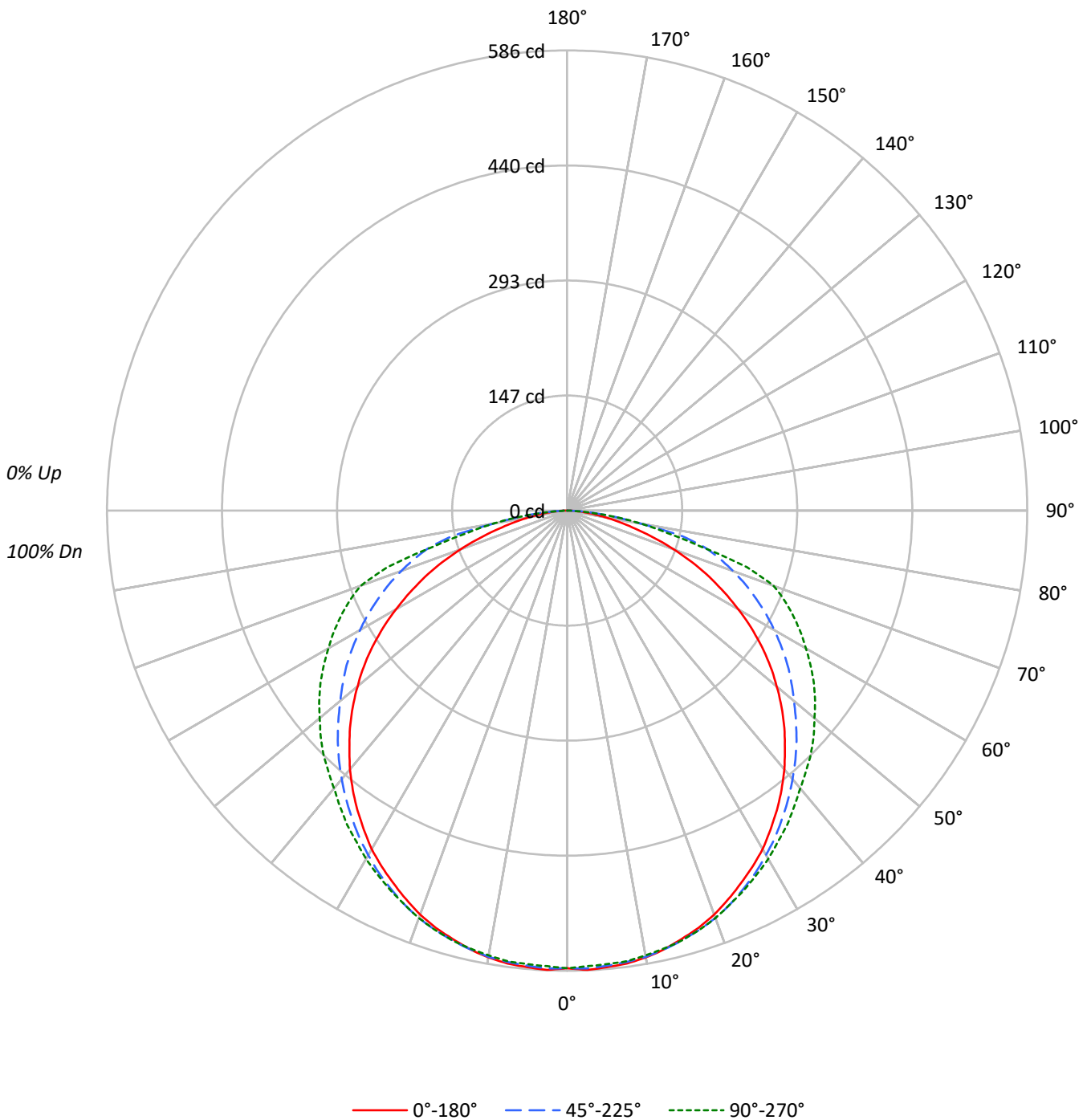
Input Watts (W): 22.327812
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	784	784	784
5°	788	786	783
10°	790	788	786
15°	786	789	789
20°	784	791	791
25°	777	789	792
30°	774	787	796
35°	765	785	802
40°	756	784	811
45°	745	786	835
50°	729	789	861
55°	710	804	900
60°	679	820	945
65°	636	846	1012
70°	569	884	1101
75°	470	945	911
80°	384	731	738
85°	309	485	455



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.3	3.0
10°-20°	159.7	8.7
20°-30°	244.1	13.2
30°-40°	298.5	16.2
40°-50°	319.4	17.3
50°-60°	305.8	16.6
60°-70°	258.7	14.0
70°-80°	164.0	8.9
80°-90°	37.7	2.0
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°	459.1	24.9
0°-40°	757.6	41.1
0°-60°	1382.8	75.0
0°-90°	1843.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1843.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	583	583	583	583	583	
5°	584	581	582	581	580	56
15°	565	564	566	566	566	159
25°	524	524	531	533	533	242
35°	466	468	478	485	488	291
45°	391	398	413	430	439	301
55°	303	312	343	371	384	270
65°	200	219	266	302	318	197
75°	90	128	182	181	175	98
85°	20	30	31	29	30	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	582.7	582.7	582.7	582.7	582.7
2.5°	585.5	582.7	583.6	582.7	580.8
5°	583.6	580.8	581.7	580.8	579.8
7.5°	581.7	578.9	579.8	578.9	578.9
10°	577.9	575.1	577.0	576.0	575.1
12.5°	572.2	570.3	572.2	571.2	571.2
15°	564.6	563.6	566.5	566.5	566.5
17.5°	557.0	556.0	559.8	559.8	559.8
20°	547.4	546.5	552.2	552.2	552.2
22.5°	536.0	535.1	542.7	542.7	542.7
25°	523.6	523.6	531.3	533.2	533.2
27.5°	511.3	511.3	519.8	522.7	522.7
30°	497.9	497.9	506.5	510.3	512.2
32.5°	481.8	483.7	493.2	497.9	499.8
35°	465.6	468.4	477.9	484.6	488.4
37.5°	448.4	451.3	462.7	470.3	475.1
40°	430.3	434.1	446.5	456.0	461.8
42.5°	410.3	416.1	430.3	442.7	450.3
45°	391.3	398.0	413.2	430.3	438.9
47.5°	370.4	378.0	395.1	417.0	425.6
50°	348.5	356.1	377.0	401.8	411.3
52.5°	326.6	335.1	359.9	386.5	398.0
55°	302.8	312.3	342.7	371.3	383.7
57.5°	278.0	289.4	323.7	354.2	367.5
60°	252.3	266.6	304.7	337.0	351.3
62.5°	225.6	242.8	285.6	319.9	335.1
65°	199.9	219.0	265.6	301.8	318.0
67.5°	172.3	196.1	245.6	284.7	299.9
70°	144.7	172.3	224.7	264.7	279.9
72.5°	117.1	150.4	203.7	239.9	239.9
75°	90.4	127.6	181.8	180.9	175.2
77.5°	68.5	106.6	149.5	127.6	128.5
80°	49.5	85.7	94.3	94.3	95.2
82.5°	33.3	65.7	60.9	60.0	61.9
85°	20.0	30.5	31.4	28.6	29.5
87.5°	9.5	10.5	8.6	5.7	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)