

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: P260677

Luminaire Tested: **24CZ-LD5-30SE-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260677
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-LD5-30SE-UNV-L93050-W2A1-U-3000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2359.7 lumens
Efficiency: N/A
Efficacy: 106.0 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

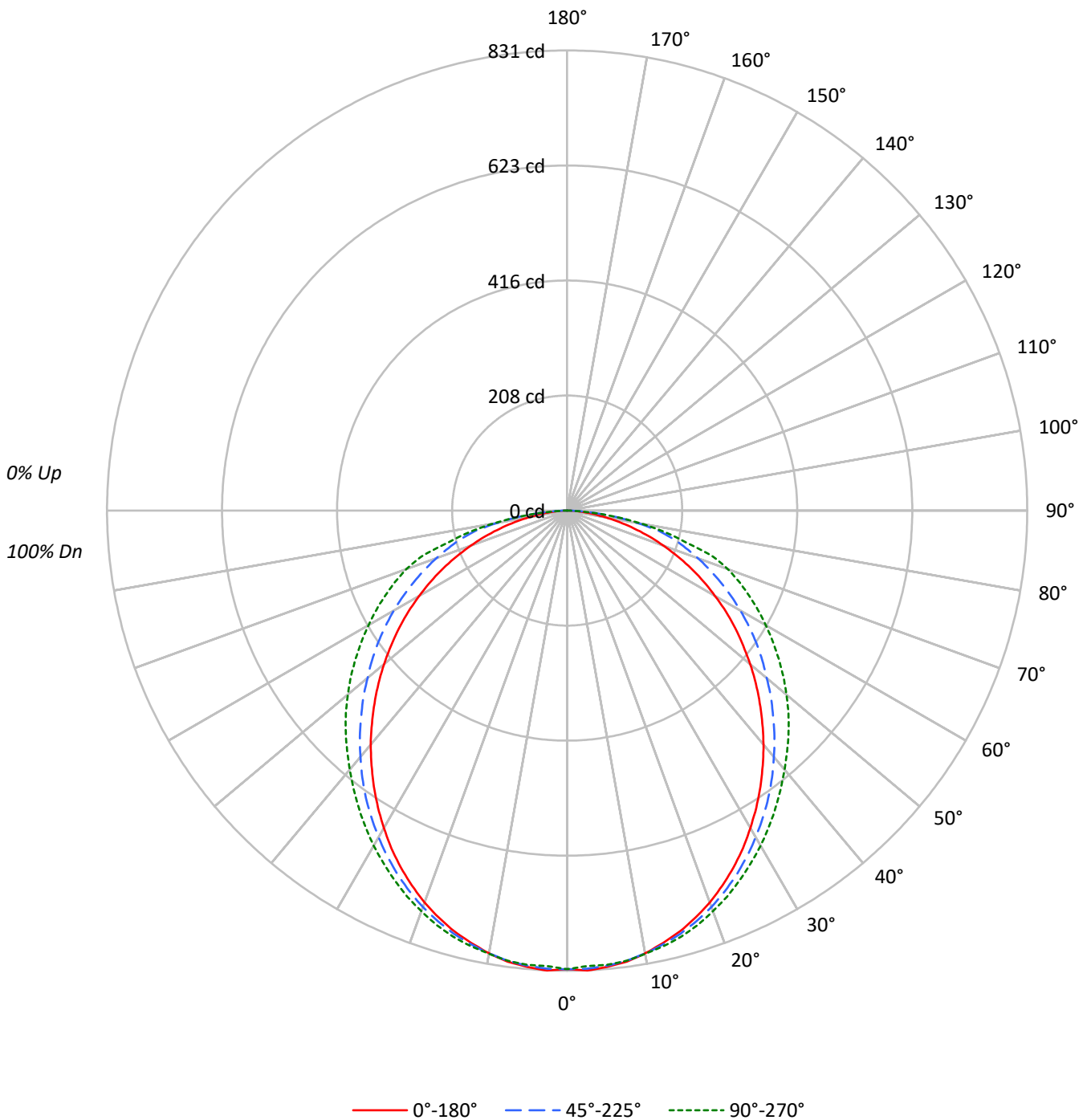
Input Watts (W): 22.262526
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1114	1114	1114
5°	1117	1114	1112
10°	1109	1109	1110
15°	1096	1102	1110
20°	1078	1091	1103
25°	1056	1076	1094
30°	1028	1058	1086
35°	999	1040	1078
40°	969	1020	1073
45°	936	1001	1076
50°	903	984	1082
55°	870	978	1094
60°	830	972	1115
65°	787	972	1152
70°	728	989	1214
75°	651	1033	1155
80°	545	989	1058
85°	412	761	724



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.3	3.3
10°-20°	222.7	9.4
20°-30°	333.0	14.1
30°-40°	395.0	16.7
40°-50°	406.5	17.2
50°-60°	373.0	15.8
60°-70°	301.6	12.8
70°-80°	195.7	8.3
80°-90°	54.0	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°	633.9	26.9
0°-40°	1028.9	43.6
0°-60°	1808.4	76.6
0°-90°	2359.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2359.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	828	828	828	828	828	
5°	827	822	825	824	823	79
15°	787	784	791	794	797	222
25°	711	712	725	731	737	327
35°	608	613	633	647	656	380
45°	492	500	526	551	566	380
55°	371	382	417	451	466	331
65°	247	262	305	346	362	244
75°	125	149	199	222	222	133
85°	27	45	49	48	47	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	828.1	828.1	828.1	828.1	828.1
2.5°	831.4	824.9	828.1	827.3	823.3
5°	827.3	821.7	824.9	824.1	823.3
7.5°	821.7	816.0	820.0	819.2	820.0
10°	812.0	807.1	812.0	812.8	812.8
12.5°	799.8	795.8	802.3	803.9	805.5
15°	786.9	783.7	791.0	794.2	796.6
17.5°	770.8	768.3	777.2	781.3	784.5
20°	753.0	752.2	761.9	765.9	770.0
22.5°	732.8	732.8	744.1	748.9	754.6
25°	711.0	711.8	724.7	731.2	736.8
27.5°	687.5	688.4	703.7	711.8	718.2
30°	661.7	664.9	681.1	691.6	698.9
32.5°	635.8	639.9	657.7	669.8	677.8
35°	608.4	613.2	633.4	647.1	656.0
37.5°	580.1	585.7	607.6	622.9	633.4
40°	551.8	558.3	580.9	598.7	610.8
42.5°	521.9	529.2	554.2	575.2	588.2
45°	492.0	500.1	526.0	551.0	565.5
47.5°	462.1	471.8	499.3	526.8	542.1
50°	431.4	441.1	470.2	501.7	517.1
52.5°	400.7	412.0	444.4	476.7	492.0
55°	370.8	382.1	416.9	450.8	466.2
57.5°	340.1	351.4	389.4	425.0	440.3
60°	308.6	321.6	361.1	397.5	414.5
62.5°	277.9	291.7	333.7	372.5	388.6
65°	247.2	261.8	305.4	345.8	362.0
67.5°	215.7	232.7	277.9	319.1	336.1
70°	185.0	203.6	251.3	292.5	308.6
72.5°	155.1	175.3	224.6	266.6	276.3
75°	125.2	148.7	198.7	222.2	222.2
77.5°	97.0	122.8	169.7	178.6	183.4
80°	70.3	98.6	127.7	138.2	136.5
82.5°	46.9	75.1	91.3	91.3	88.9
85°	26.7	45.2	49.3	47.7	46.9
87.5°	11.3	17.0	15.4	12.1	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)