

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: P276823

Luminaire Tested: **24CZ2-45HE-RDP-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276823
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45HE-RDP-UNV-L93050-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2425.5 lumens
Efficiency: N/A
Efficacy: 75.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

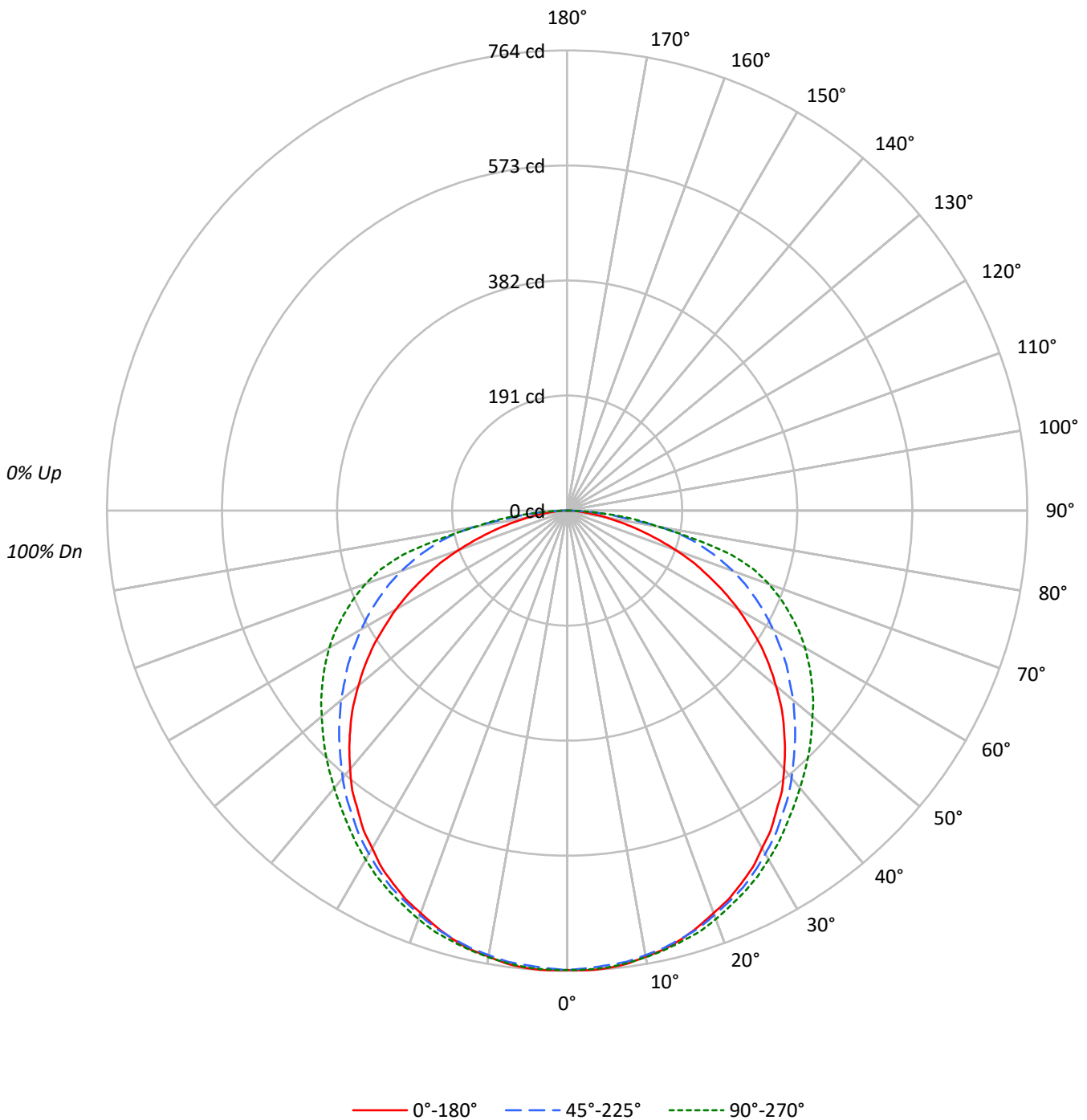
Input Watts (W): 32.031246
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1026	1026	1026
5°	1030	1024	1029
10°	1027	1024	1029
15°	1026	1024	1031
20°	1018	1023	1034
25°	1015	1025	1036
30°	1006	1022	1039
35°	996	1020	1043
40°	985	1019	1056
45°	968	1019	1081
50°	947	1025	1113
55°	923	1041	1163
60°	884	1062	1227
65°	827	1099	1302
70°	753	1150	1401
75°	638	1213	1463
80°	504	1221	1184
85°	372	929	1041



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.4	3.0
10°-20°	208.2	8.6
20°-30°	318.4	13.1
30°-40°	389.3	16.0
40°-50°	414.9	17.1
50°-60°	396.7	16.4
60°-70°	336.1	13.9
70°-80°	225.9	9.3
80°-90°	63.7	2.6
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°	599.0	24.7
0°-40°	988.3	40.7
0°-60°	1799.9	74.2
0°-90°	2425.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2425.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	763	763	763	763	763	
5°	763	762	758	762	762	72
15°	736	736	735	741	740	208
25°	683	686	691	697	698	315
35°	606	611	621	633	635	380
45°	509	517	535	558	568	393
55°	393	408	444	479	496	350
65°	260	286	345	391	409	258
75°	123	167	233	273	282	131
85°	24	49	60	65	67	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	762.8	762.8	762.8	762.8	762.8
2.5°	764.0	764.0	760.4	762.8	762.8
5°	762.8	761.6	757.9	761.6	761.6
7.5°	759.1	757.9	755.5	759.1	757.9
10°	751.9	751.9	749.5	753.1	753.1
12.5°	745.9	744.7	743.5	748.3	747.1
15°	736.3	736.3	735.1	741.1	739.9
17.5°	724.3	725.5	726.7	731.5	732.7
20°	711.0	713.4	714.6	721.9	721.9
22.5°	699.0	700.2	702.6	709.8	709.8
25°	683.4	685.8	690.6	696.6	697.8
27.5°	667.7	668.9	674.9	683.4	684.6
30°	647.3	650.9	658.1	667.7	668.9
32.5°	629.2	632.8	641.2	650.9	653.3
35°	606.4	611.2	620.8	632.8	635.2
37.5°	585.9	589.5	601.5	614.8	618.4
40°	560.6	567.9	579.9	595.5	601.5
42.5°	535.4	542.6	557.0	577.5	584.7
45°	508.9	517.3	535.4	558.2	567.9
47.5°	482.4	492.1	512.5	539.0	549.8
50°	452.4	464.4	489.7	519.7	531.8
52.5°	423.5	437.9	465.6	499.3	514.9
55°	393.4	407.8	443.9	478.8	495.7
57.5°	359.7	379.0	418.7	458.4	476.4
60°	328.4	346.5	394.6	437.9	456.0
62.5°	294.8	318.8	370.6	416.3	434.3
65°	259.9	286.3	345.3	391.0	409.0
67.5°	228.6	257.5	320.0	365.7	383.8
70°	191.3	227.4	292.4	338.1	356.1
72.5°	156.4	196.1	263.5	308.0	324.8
75°	122.7	167.2	233.4	273.1	281.5
77.5°	91.4	138.4	202.1	219.0	212.9
80°	65.0	110.7	157.6	149.2	152.8
82.5°	42.1	84.2	97.5	110.7	114.3
85°	24.1	49.3	60.2	65.0	67.4
87.5°	10.8	18.0	24.1	24.1	22.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)