

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: P275607

Luminaire Tested: **14CZ2-39-S-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275607
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39-S-UNV-L93050-W2A1-U-3500K
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3304.0 lumens
Efficiency: N/A
Efficacy: 104.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

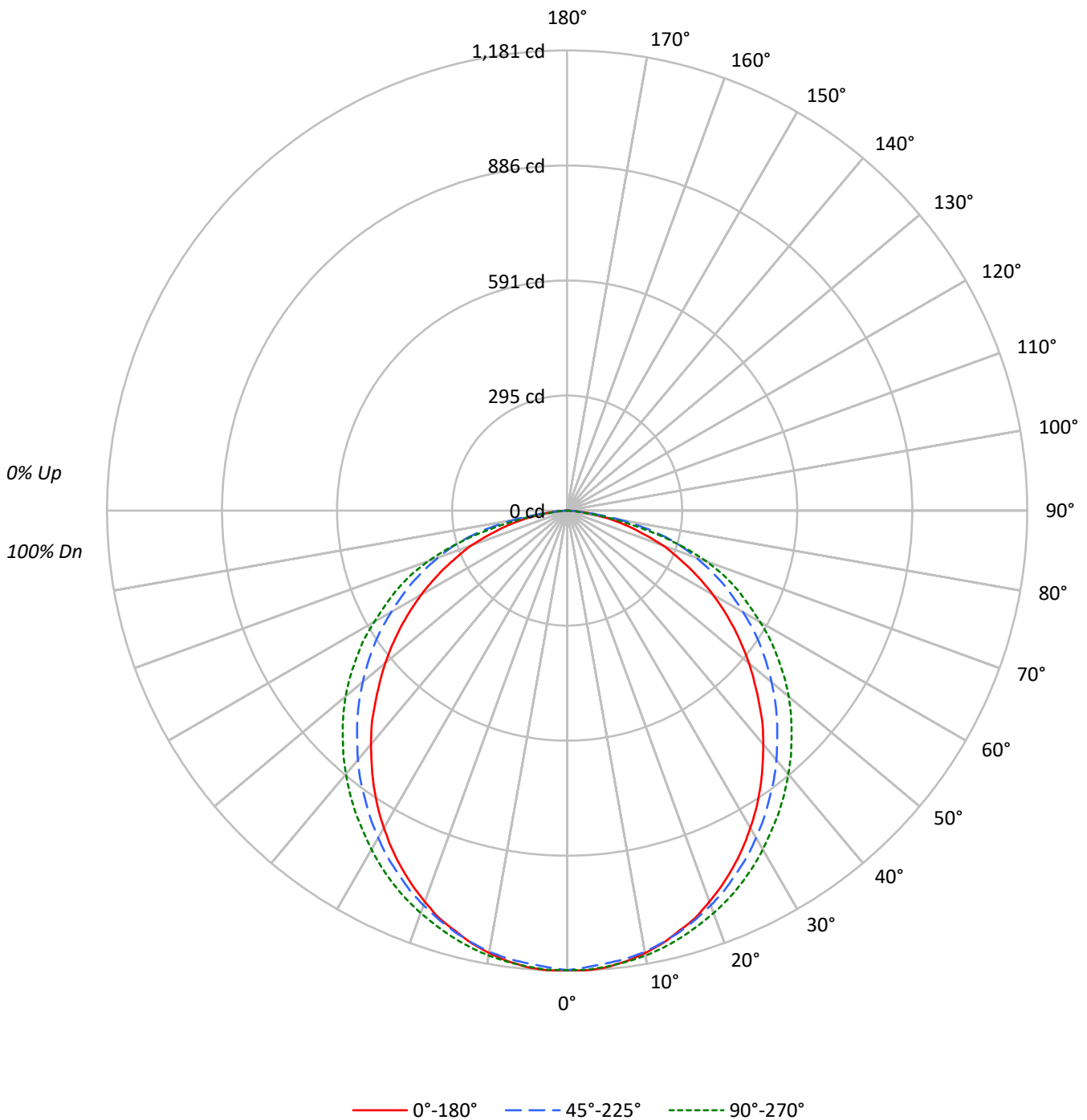
Input Watts (W): 31.527
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84					84			
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70					70			
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58					58			
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50					50			
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	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	28	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°	3174	3174	3174
5°	3177	3151	3173
10°	3151	3142	3169
15°	3108	3117	3158
20°	3059	3087	3148
25°	2996	3050	3137
30°	2922	3013	3120
35°	2841	2971	3111
40°	2751	2935	3102
45°	2649	2899	3099
50°	2551	2866	3107
55°	2444	2844	3097
60°	2328	2803	3077
65°	2190	2795	3077
70°	2062	2771	2991
75°	1788	2708	2555
80°	1447	2183	1702
85°	960	760	506



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.4	3.4
10°-20°	316.9	9.6
20°-30°	475.4	14.4
30°-40°	567.1	17.2
40°-50°	586.3	17.7
50°-60°	535.3	16.2
60°-70°	421.2	12.7
70°-80°	245.2	7.4
80°-90°	45.2	1.4
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°	903.7	27.4
0°-40°	1470.8	44.5
0°-60°	2592.4	78.5
0°-90°	3304.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3304.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1180	1180	1180	1180	1180	
5°	1176	1173	1166	1176	1175	112
15°	1116	1117	1119	1134	1134	315
25°	1009	1014	1027	1052	1057	465
35°	865	876	904	939	947	541
45°	696	719	762	804	814	538
55°	521	549	606	650	660	466
65°	344	380	439	473	483	342
75°	172	213	260	256	246	183
85°	31	44	25	20	16	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1179.5	1179.5	1179.5	1179.5	1179.5
2.5°	1181.1	1177.8	1172.9	1181.1	1179.5
5°	1176.2	1172.9	1166.4	1176.2	1174.6
7.5°	1166.4	1163.1	1159.8	1169.6	1168.0
10°	1153.3	1151.6	1150.0	1161.5	1159.8
12.5°	1136.9	1136.9	1135.2	1148.3	1148.3
15°	1115.6	1117.2	1118.9	1133.6	1133.6
17.5°	1095.9	1094.3	1099.2	1115.6	1117.2
20°	1068.1	1071.4	1077.9	1097.6	1099.2
22.5°	1040.2	1043.5	1055.0	1074.6	1079.5
25°	1009.1	1014.0	1027.1	1051.7	1056.6
27.5°	976.3	982.9	1000.9	1027.1	1032.0
30°	940.3	950.1	969.8	999.3	1004.2
32.5°	904.3	914.1	938.7	968.2	974.7
35°	864.9	876.4	904.3	938.7	946.9
37.5°	824.0	838.7	871.5	905.9	915.7
40°	783.0	799.4	835.5	871.5	883.0
42.5°	742.1	758.5	797.8	838.7	850.2
45°	696.2	719.2	761.7	804.3	814.2
47.5°	652.0	676.6	724.1	766.7	779.8
50°	609.4	634.0	684.7	729.0	742.1
52.5°	565.2	591.4	645.4	691.3	702.8
55°	520.9	548.8	606.1	650.3	660.2
57.5°	476.7	506.2	565.2	607.8	619.2
60°	432.5	463.6	520.9	563.5	571.7
62.5°	388.2	421.0	480.0	517.7	525.8
65°	344.0	380.1	439.0	473.4	483.3
67.5°	301.4	337.5	394.8	427.6	435.7
70°	262.1	294.9	352.2	376.8	380.1
72.5°	213.0	253.9	309.6	322.7	314.5
75°	172.0	213.0	260.5	255.6	245.7
77.5°	131.1	172.0	203.1	186.7	173.6
80°	93.4	134.3	140.9	116.3	109.8
82.5°	60.6	93.4	78.6	60.6	49.1
85°	31.1	44.2	24.6	19.7	16.4
87.5°	9.8	6.6	3.3	3.3	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)