

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: P277475

Luminaire Tested: **22CZ2-39HE-S-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277475
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39HE-S-UNV-L92765-W2A1-U-5000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3578.0 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

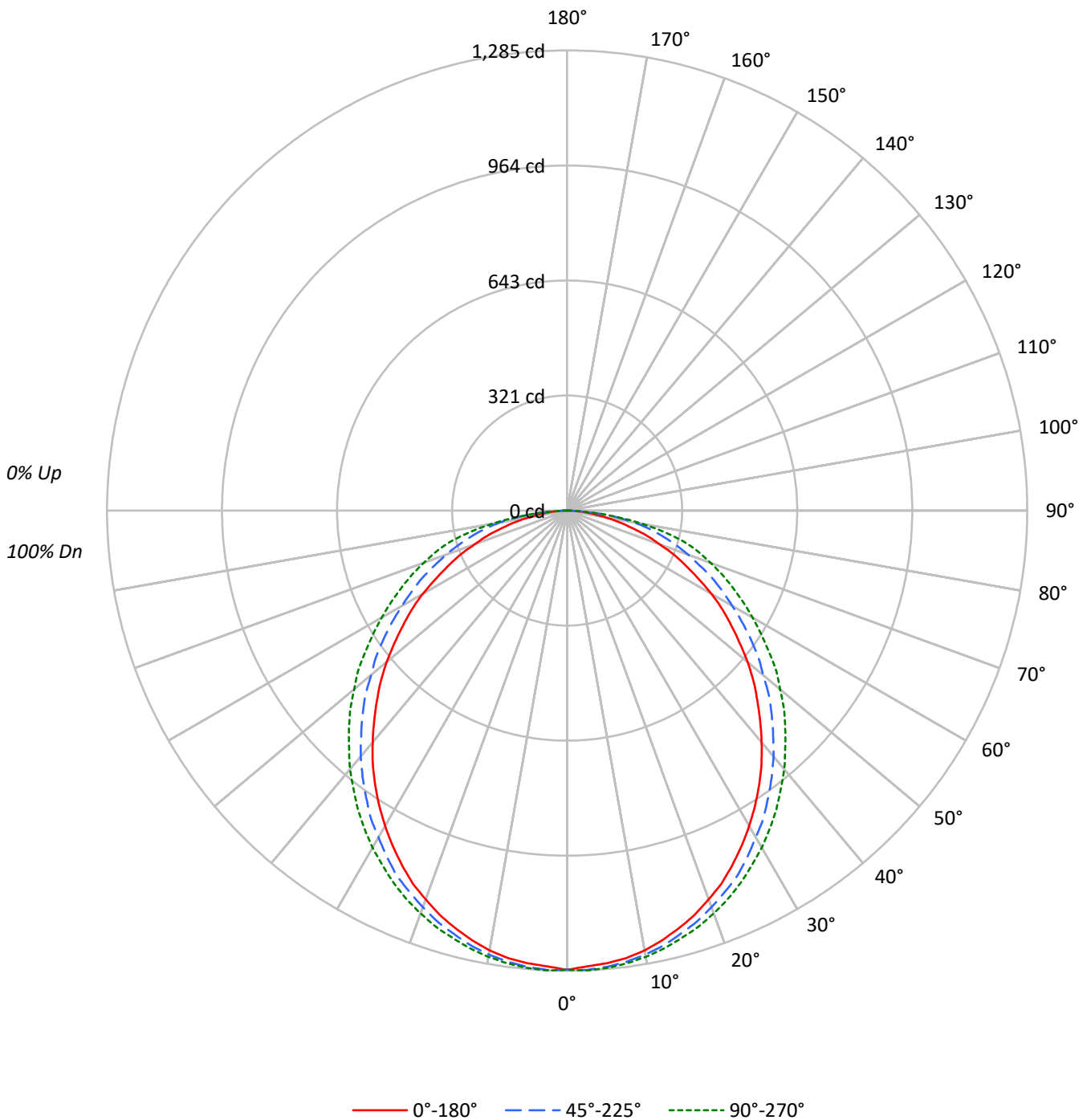
Input Watts (W): 30.876
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	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	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3450	3450	3450
5°	3427	3454	3463
10°	3408	3439	3458
15°	3363	3409	3442
20°	3308	3375	3428
25°	3242	3341	3405
30°	3159	3273	3377
35°	3071	3214	3345
40°	2967	3149	3313
45°	2859	3075	3278
50°	2753	2991	3250
55°	2624	2937	3227
60°	2507	2866	3216
65°	2339	2849	3252
70°	2154	2824	3349
75°	1944	2864	3524
80°	1681	2949	3312
85°	1392	2473	2473



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.2	3.4
10°-20°	345.0	9.6
20°-30°	516.3	14.4
30°-40°	611.4	17.1
40°-50°	623.1	17.4
50°-60°	558.5	15.6
60°-70°	437.2	12.2
70°-80°	281.9	7.9
80°-90°	83.3	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°	982.6	27.5
0°-40°	1594.0	44.5
0°-60°	2775.5	77.6
0°-90°	3578.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3578.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1282	1282	1282	1282	1282	
5°	1269	1272	1279	1280	1282	120
15°	1207	1214	1224	1234	1235	340
25°	1092	1102	1125	1140	1147	503
35°	935	947	978	1008	1018	584
45°	751	768	808	850	861	580
55°	559	578	626	669	688	501
65°	367	389	447	491	511	365
75°	187	215	276	322	339	200
85°	45	62	80	80	80	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1282.1	1282.1	1282.1	1282.1	1282.1
2.5°	1273.8	1277.1	1283.8	1285.4	1285.4
5°	1268.8	1272.1	1278.8	1280.4	1282.1
7.5°	1260.4	1262.1	1270.4	1273.8	1275.4
10°	1247.1	1250.4	1258.7	1263.7	1265.4
12.5°	1228.7	1233.7	1243.7	1250.4	1252.1
15°	1207.0	1213.7	1223.7	1233.7	1235.4
17.5°	1183.6	1190.3	1203.6	1215.3	1218.7
20°	1155.2	1163.6	1178.6	1192.0	1197.0
22.5°	1126.9	1133.5	1151.9	1168.6	1173.6
25°	1091.8	1101.8	1125.2	1140.2	1146.9
27.5°	1055.1	1066.8	1090.1	1110.2	1116.8
30°	1016.7	1028.4	1053.4	1078.4	1086.8
32.5°	976.6	990.0	1020.0	1045.1	1053.4
35°	934.9	946.6	978.3	1008.3	1018.3
37.5°	891.5	901.5	938.2	969.9	979.9
40°	844.7	858.1	896.5	933.2	943.2
42.5°	798.0	813.0	851.4	891.5	901.5
45°	751.2	767.9	808.0	849.7	861.4
47.5°	706.2	719.5	764.6	804.7	821.4
50°	657.7	671.1	714.5	759.6	776.3
52.5°	607.7	626.0	672.8	716.2	736.2
55°	559.3	577.6	626.0	669.4	687.8
57.5°	514.2	529.2	579.3	624.4	642.7
60°	465.8	479.1	532.5	581.0	597.6
62.5°	414.0	434.0	489.1	534.2	554.2
65°	367.3	389.0	447.4	490.8	510.8
67.5°	323.9	343.9	400.7	447.4	469.1
70°	273.8	300.5	358.9	405.7	425.7
72.5°	233.7	257.1	317.2	363.9	385.6
75°	187.0	215.4	275.5	322.2	338.9
77.5°	148.6	177.0	233.7	270.4	278.8
80°	108.5	136.9	190.3	208.7	213.7
82.5°	73.5	100.2	136.9	141.9	143.6
85°	45.1	61.8	80.1	80.1	80.1
87.5°	21.7	25.0	28.4	26.7	26.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)