

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: P277174

Luminaire Tested: **22CZ2-39HE-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277174
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39HE-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3854.0 lumens
Efficiency: N/A
Efficacy: 125.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

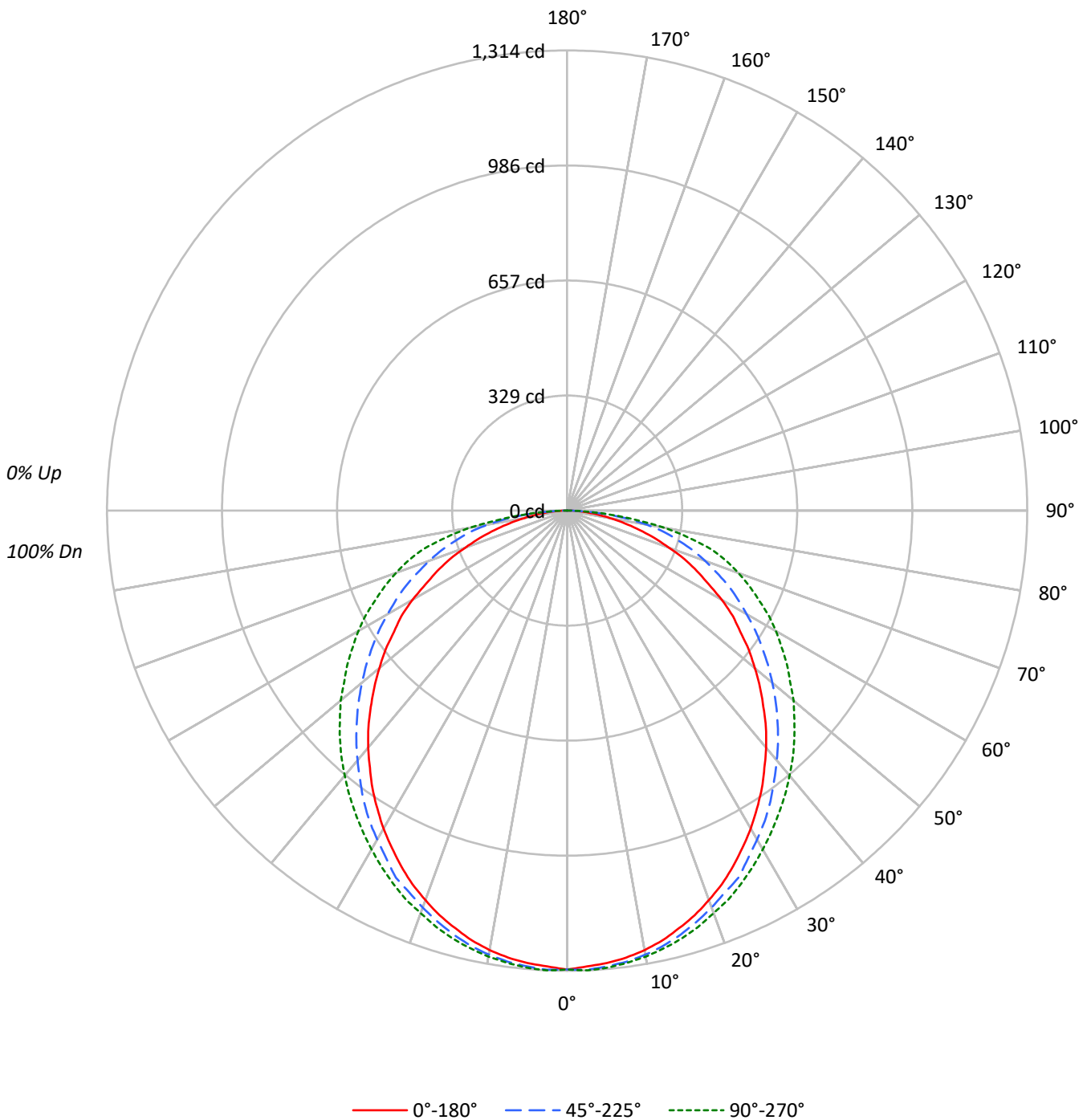
Input Watts (W): 30.783
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82					82			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68					68			
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56					56			
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48					48			
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41					41			
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36					36			
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32					32			
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28					28			
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25					25			
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3526	3526	3526
5°	3504	3529	3540
10°	3482	3519	3534
15°	3439	3492	3524
20°	3389	3454	3503
25°	3328	3435	3491
30°	3259	3371	3471
35°	3184	3327	3464
40°	3104	3271	3471
45°	3017	3233	3493
50°	2930	3200	3533
55°	2829	3185	3595
60°	2745	3185	3705
65°	2608	3236	3840
70°	2432	3297	4088
75°	2228	3411	4417
80°	1940	3556	4350
85°	1698	3162	3455



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.9	3.2
10°-20°	353.0	9.2
20°-30°	529.9	13.7
30°-40°	633.2	16.4
40°-50°	658.4	17.1
50°-60°	610.3	15.8
60°-70°	500.6	13.0
70°-80°	338.4	8.8
80°-90°	106.3	2.8
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°	1006.8	26.1
0°-40°	1640.0	42.6
0°-60°	2908.7	75.5
0°-90°	3854.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3854.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1310	1310	1310	1310	1310	
5°	1297	1299	1307	1308	1310	123
15°	1235	1240	1254	1261	1265	348
25°	1121	1130	1157	1170	1176	516
35°	969	982	1013	1043	1054	606
45°	793	808	850	899	918	612
55°	603	622	679	740	766	542
65°	410	432	508	575	603	405
75°	214	250	328	394	425	227
85°	55	76	102	114	112	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1310.4	1310.4	1310.4	1310.4	1310.4
2.5°	1302.8	1306.6	1312.3	1314.2	1314.2
5°	1297.2	1299.1	1306.6	1308.5	1310.4
7.5°	1287.7	1291.5	1299.1	1300.9	1302.8
10°	1274.4	1278.2	1287.7	1291.5	1293.4
12.5°	1257.3	1261.1	1272.5	1278.2	1280.1
15°	1234.6	1240.3	1253.5	1261.1	1264.9
17.5°	1211.8	1217.5	1230.8	1242.2	1246.0
20°	1183.4	1196.6	1206.1	1221.3	1223.2
22.5°	1154.9	1162.5	1179.6	1194.7	1202.3
25°	1120.8	1130.3	1156.8	1170.1	1175.8
27.5°	1084.8	1098.0	1118.9	1139.8	1147.3
30°	1048.7	1058.2	1084.8	1109.4	1117.0
32.5°	1008.9	1022.2	1050.6	1075.3	1086.7
35°	969.1	982.3	1012.7	1043.0	1054.4
37.5°	925.5	940.6	971.0	1007.0	1022.2
40°	883.7	895.1	931.1	974.8	988.0
42.5°	840.1	853.4	891.3	938.7	953.9
45°	792.7	807.9	849.6	898.9	917.9
47.5°	747.2	762.4	807.9	857.2	879.9
50°	699.8	718.7	764.3	821.2	843.9
52.5°	654.3	671.3	722.5	781.3	802.2
55°	603.1	622.0	678.9	739.6	766.2
57.5°	561.3	574.6	637.2	699.8	726.3
60°	510.1	527.2	591.7	658.1	688.4
62.5°	455.1	483.6	550.0	618.2	648.6
65°	409.6	432.4	508.2	574.6	603.1
67.5°	362.2	386.9	460.8	531.0	563.2
70°	309.1	341.4	419.1	489.3	519.6
72.5°	261.7	295.8	375.5	443.8	476.0
75°	214.3	250.3	328.1	394.5	424.8
77.5°	168.8	208.6	284.5	335.7	354.6
80°	125.2	163.1	229.5	265.5	280.7
82.5°	87.2	119.5	168.8	187.7	191.5
85°	55.0	75.9	102.4	113.8	111.9
87.5°	24.7	30.3	37.9	41.7	39.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)