

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: P474920

Luminaire Tested: **22CZ2-39VHE-S-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474920
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39VHE-S-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3998.6 lumens
Efficiency: N/A
Efficacy: 149.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

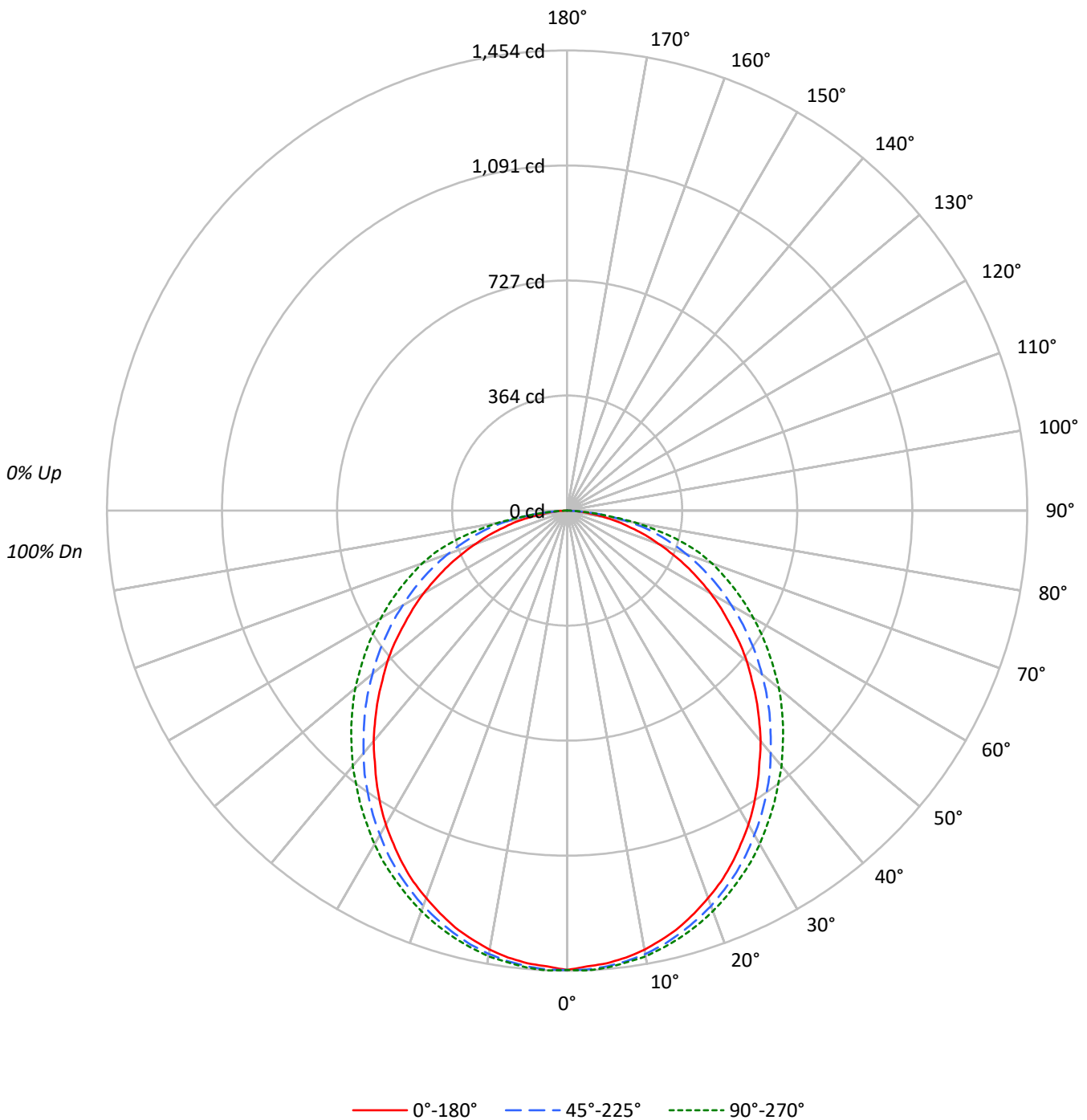
Input Watts (W): 26.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	88	86	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3906	3906	3906
5°	3879	3905	3916
10°	3850	3887	3908
15°	3801	3852	3885
20°	3730	3808	3857
25°	3655	3749	3818
30°	3560	3677	3782
35°	3449	3602	3735
40°	3341	3515	3702
45°	3218	3440	3672
50°	3103	3363	3658
55°	2956	3296	3641
60°	2823	3229	3656
65°	2649	3192	3709
70°	2421	3152	3829
75°	2173	3129	3833
80°	1830	2954	3405
85°	1374	2001	1853



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.1	3.4
10°-20°	389.4	9.7
20°-30°	580.5	14.5
30°-40°	685.0	17.1
40°-50°	697.9	17.5
50°-60°	629.4	15.7
60°-70°	494.3	12.4
70°-80°	309.0	7.7
80°-90°	76.2	1.9
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°	1106.9	27.7
0°-40°	1791.9	44.8
0°-60°	3119.2	78.0
0°-90°	3998.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3998.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1452	1452	1452	1452	1452	
5°	1436	1439	1446	1449	1450	136
15°	1364	1369	1383	1392	1394	384
25°	1231	1238	1263	1281	1286	566
35°	1050	1064	1096	1126	1137	657
45°	846	860	904	947	965	652
55°	630	650	702	757	776	565
65°	416	438	501	557	582	411
75°	209	238	301	352	369	223
85°	44	57	65	64	60	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1451.5	1451.5	1451.5	1451.5	1451.5
2.5°	1441.8	1444.7	1451.5	1454.4	1454.4
5°	1436.0	1438.9	1445.7	1448.6	1449.6
7.5°	1424.4	1428.3	1436.0	1439.9	1439.9
10°	1408.9	1413.8	1422.5	1428.3	1430.2
12.5°	1387.6	1393.4	1405.1	1411.8	1413.8
15°	1364.4	1369.2	1382.8	1392.5	1394.4
17.5°	1334.4	1342.2	1356.7	1369.2	1372.2
20°	1302.5	1311.2	1329.6	1344.1	1347.0
22.5°	1269.6	1276.4	1296.7	1314.1	1318.0
25°	1230.9	1237.6	1262.8	1281.2	1286.0
27.5°	1188.3	1199.9	1225.1	1246.4	1254.1
30°	1145.7	1157.3	1183.5	1208.6	1217.3
32.5°	1099.3	1111.8	1141.8	1168.0	1176.7
35°	1049.9	1064.4	1096.4	1126.4	1137.0
37.5°	998.6	1015.1	1050.9	1082.8	1094.4
40°	951.2	962.8	1000.6	1037.3	1053.8
42.5°	898.0	913.5	951.2	992.8	1008.3
45°	845.7	860.3	903.8	947.3	964.8
47.5°	791.6	809.9	853.5	901.9	919.3
50°	741.2	756.7	803.2	854.4	873.8
52.5°	687.0	703.5	753.8	807.0	824.5
55°	630.0	650.3	702.5	756.7	776.1
57.5°	577.7	597.1	652.2	708.3	728.7
60°	524.5	543.8	600.0	657.0	679.3
62.5°	468.4	490.6	551.6	606.7	631.9
65°	416.1	438.4	501.3	557.4	582.5
67.5°	360.9	387.1	450.0	509.0	534.2
70°	307.7	338.7	400.6	458.7	486.7
72.5°	260.3	285.5	350.3	411.3	434.5
75°	209.0	238.0	300.9	352.2	368.7
77.5°	165.5	190.6	250.6	284.5	295.1
80°	118.1	146.1	190.6	211.0	219.7
82.5°	78.4	101.6	129.7	133.5	131.6
85°	44.5	57.1	64.8	63.9	60.0
87.5°	17.4	19.4	14.5	8.7	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)