

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: P475154

Luminaire Tested: **22CZ2-50VHE-HRP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475154
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-50VHE-HRP-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ HRP
INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4120.6 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

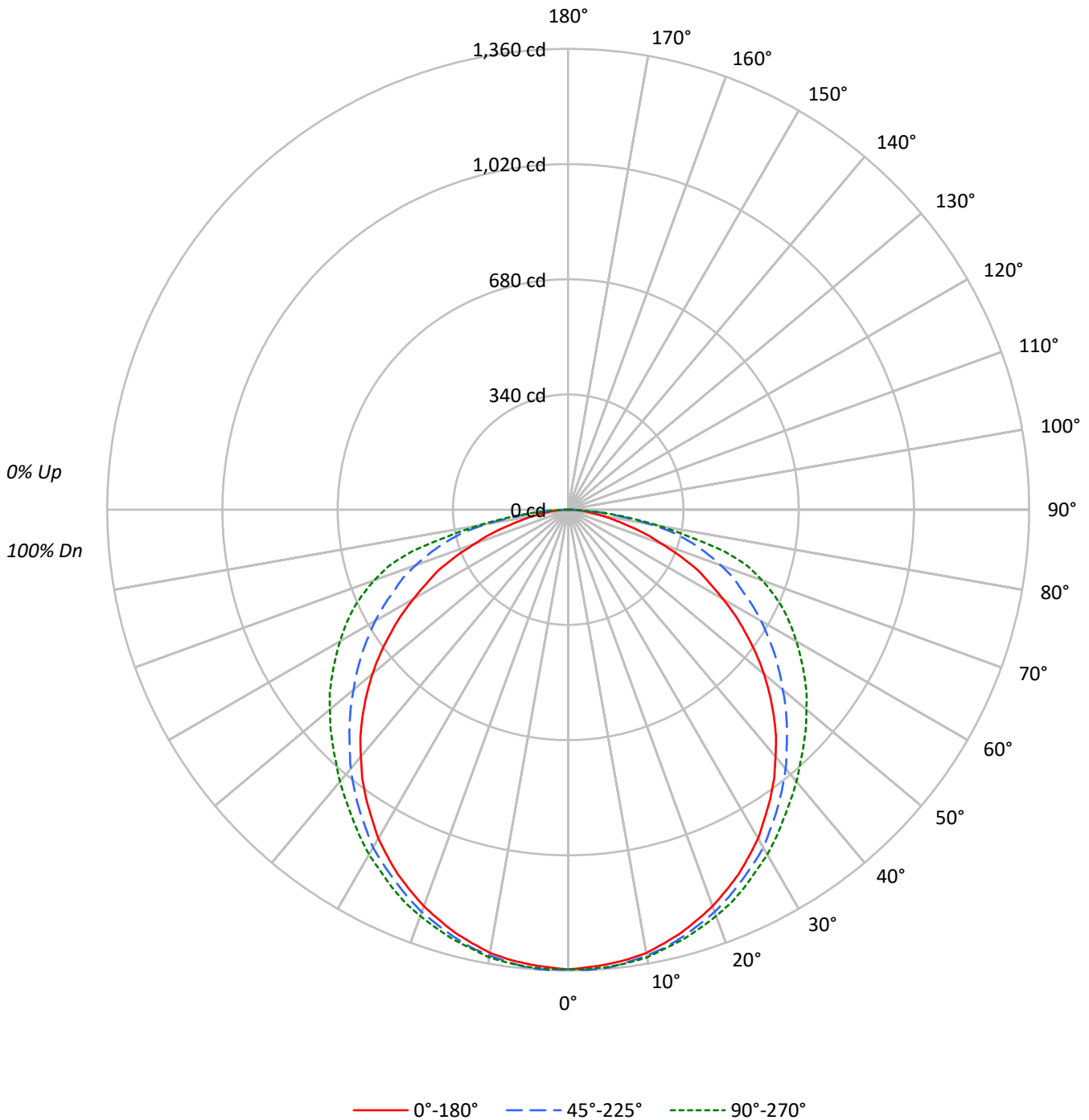
Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	96	93	96	93	90		92	90	87		89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73		80	75	71		77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		50	43	38		49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34		46	39	34		44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27		39	32	27		38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	25		35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3651	3651	3651
5°	3637	3665	3658
10°	3630	3651	3665
15°	3599	3635	3657
20°	3566	3618	3655
25°	3527	3589	3651
30°	3481	3578	3651
35°	3415	3535	3646
40°	3342	3506	3680
45°	3264	3473	3739
50°	3156	3460	3841
55°	3012	3488	3988
60°	2840	3539	4183
65°	2681	3608	4469
70°	2291	3763	4785
75°	1919	3920	4973
80°	1573	3786	4148
85°	1362	2807	3047



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.6	3.1
10°-20°	367.9	8.9
20°-30°	557.5	13.5
30°-40°	673.2	16.3
40°-50°	707.3	17.2
50°-60°	665.5	16.2
60°-70°	554.9	13.5
70°-80°	367.7	8.9
80°-90°	98.0	2.4
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°	1054.0	25.6
0°-40°	1727.1	41.9
0°-60°	3100.0	75.2
0°-90°	4120.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4120.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1357	1357	1357	1357	1357	
5°	1346	1349	1357	1357	1354	128
15°	1292	1297	1305	1310	1313	364
25°	1188	1196	1209	1224	1230	547
35°	1040	1050	1076	1100	1110	650
45°	858	871	912	959	982	661
55°	642	671	744	819	850	574
65°	421	457	567	660	702	410
75°	185	257	377	455	478	200
85°	44	68	91	99	99	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1356.8	1356.8	1356.8	1356.8	1356.8
2.5°	1351.7	1354.3	1359.6	1359.6	1356.8
5°	1346.5	1349.0	1356.8	1356.8	1354.3
7.5°	1338.6	1341.4	1346.5	1351.7	1349.0
10°	1328.3	1330.8	1336.1	1341.4	1341.4
12.5°	1310.2	1312.7	1323.0	1325.8	1325.8
15°	1291.8	1297.1	1304.9	1310.2	1312.7
17.5°	1268.6	1273.7	1284.0	1294.6	1294.6
20°	1245.2	1250.2	1263.3	1273.7	1276.2
22.5°	1216.5	1224.3	1237.4	1250.2	1255.5
25°	1188.0	1195.8	1208.7	1224.3	1229.6
27.5°	1154.0	1161.8	1180.2	1198.4	1200.9
30°	1120.3	1128.1	1151.5	1167.1	1174.9
32.5°	1078.7	1089.1	1112.5	1135.9	1143.7
35°	1039.7	1050.3	1076.2	1099.6	1110.0
37.5°	998.1	1008.5	1037.2	1065.9	1078.7
40°	951.3	964.4	998.1	1029.4	1047.5
42.5°	907.2	920.3	954.1	995.6	1013.7
45°	857.8	870.7	912.5	959.1	982.5
47.5°	805.7	821.3	870.7	928.1	951.3
50°	753.8	772.0	826.6	891.6	917.5
52.5°	699.2	722.6	785.1	855.3	886.3
55°	642.0	670.7	743.5	818.8	850.0
57.5°	587.3	613.5	699.2	779.8	813.5
60°	527.7	561.4	657.6	740.7	777.2
62.5°	470.5	507.0	613.5	701.9	740.7
65°	421.1	457.4	566.7	660.1	701.9
67.5°	356.1	405.5	527.7	616.1	657.6
70°	291.2	358.7	478.3	569.2	608.2
72.5°	241.8	306.8	428.9	519.8	556.4
75°	184.6	257.4	377.0	454.9	478.3
77.5°	137.8	213.1	322.4	361.4	363.9
80°	101.5	163.7	244.3	257.4	267.7
82.5°	70.3	114.3	158.7	174.0	179.3
85°	44.1	67.5	90.9	98.7	98.7
87.5°	23.4	25.9	31.2	31.2	31.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)