

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: P474885

Luminaire Tested: **22CZ2-34HE-S-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474885
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34HE-S-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3372.4 lumens
Efficiency: N/A
Efficacy: 138.8 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

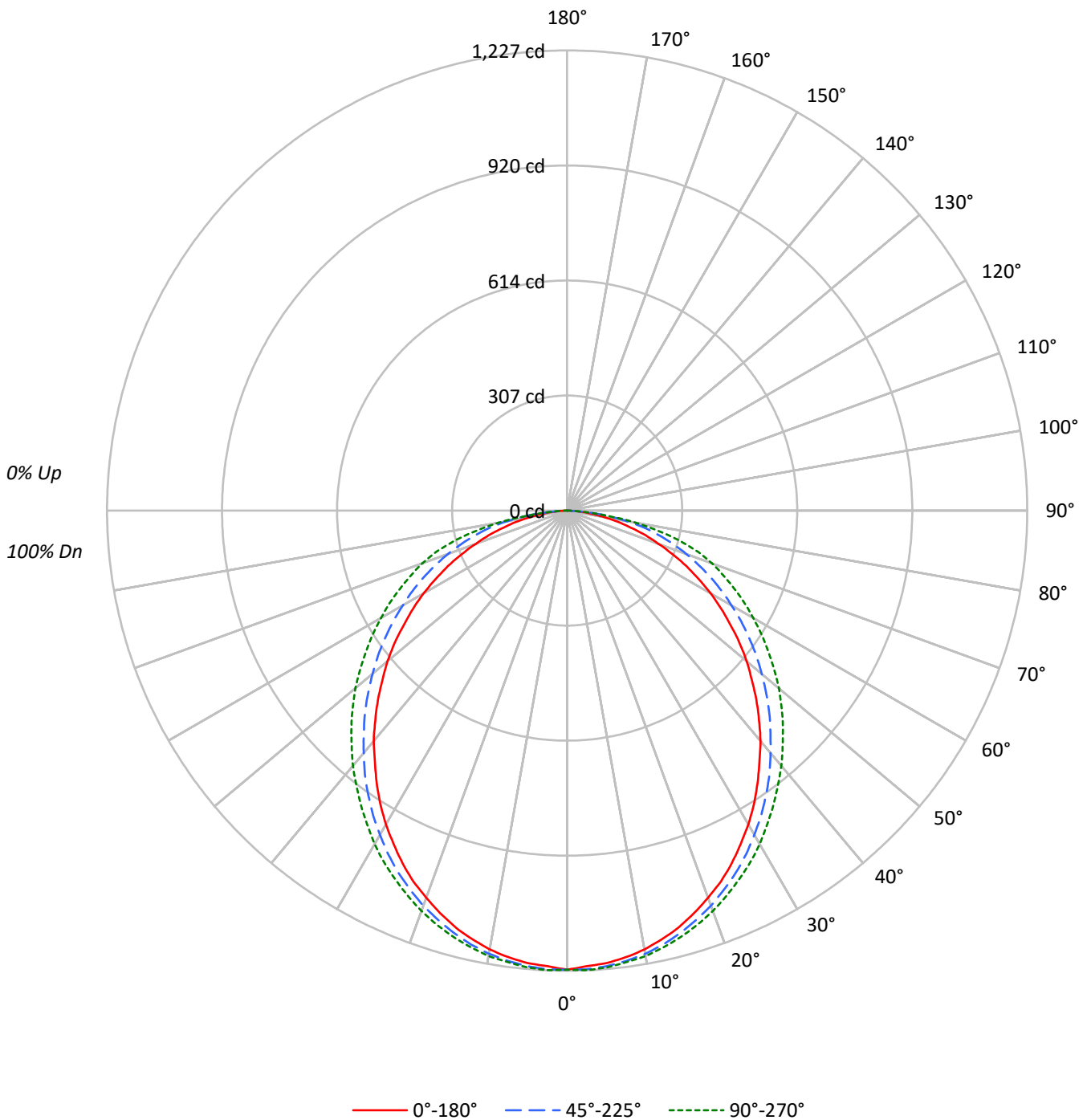
Input Watts (W): 24.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P474885

CATALOG NUMBER: 22CZ2-34HE-S-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P474885

CATALOG NUMBER: 22CZ2-34HE-S-UNV-L830-CD1-U

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°	3294	3294	3294
5°	3271	3294	3302
10°	3247	3278	3296
15°	3206	3249	3276
20°	3146	3211	3253
25°	3082	3162	3220
30°	3003	3101	3190
35°	2909	3038	3150
40°	2818	2964	3122
45°	2715	2901	3097
50°	2617	2836	3085
55°	2493	2780	3071
60°	2380	2723	3083
65°	2234	2692	3128
70°	2042	2659	3230
75°	1833	2639	3232
80°	1543	2492	2872
85°	1158	1689	1562



TEST NUMBER: P474885

CATALOG NUMBER: 22CZ2-34HE-S-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.6	3.4
10°-20°	328.4	9.7
20°-30°	489.6	14.5
30°-40°	577.7	17.1
40°-50°	588.6	17.5
50°-60°	530.8	15.7
60°-70°	416.9	12.4
70°-80°	260.6	7.7
80°-90°	64.2	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°	933.6	27.7
0°-40°	1511.3	44.8
0°-60°	2630.7	78.0
0°-90°	3372.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3372.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1224	1224	1224	1224	1224	
5°	1211	1214	1219	1222	1222	115
15°	1151	1155	1166	1174	1176	324
25°	1038	1044	1065	1080	1085	478
35°	886	898	925	950	959	554
45°	713	726	762	799	814	550
55°	531	548	592	638	654	477
65°	351	370	423	470	491	347
75°	176	201	254	297	311	188
85°	38	48	55	54	51	46
90°	0	0	0	0	0	



TEST NUMBER: P474885

CATALOG NUMBER: 22CZ2-34HE-S-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1224.2	1224.2	1224.2	1224.2	1224.2
2.5°	1216.0	1218.5	1224.2	1226.6	1226.6
5°	1211.1	1213.6	1219.3	1221.7	1222.5
7.5°	1201.3	1204.6	1211.1	1214.4	1214.4
10°	1188.3	1192.4	1199.7	1204.6	1206.2
12.5°	1170.3	1175.2	1185.0	1190.7	1192.4
15°	1150.7	1154.8	1166.2	1174.4	1176.0
17.5°	1125.4	1132.0	1144.2	1154.8	1157.3
20°	1098.5	1105.8	1121.4	1133.6	1136.0
22.5°	1070.8	1076.5	1093.6	1108.3	1111.6
25°	1038.1	1043.8	1065.0	1080.5	1084.6
27.5°	1002.2	1012.0	1033.2	1051.2	1057.7
30°	966.3	976.1	998.1	1019.3	1026.7
32.5°	927.1	937.7	963.0	985.1	992.4
35°	885.5	897.7	924.7	950.0	958.9
37.5°	842.2	856.1	886.3	913.2	923.0
40°	802.2	812.0	843.9	874.9	888.8
42.5°	757.4	770.4	802.2	837.3	850.4
45°	713.3	725.5	762.3	799.0	813.7
47.5°	667.6	683.1	719.8	760.6	775.3
50°	625.1	638.2	677.4	720.6	737.0
52.5°	579.4	593.3	635.8	680.6	695.3
55°	531.3	548.4	592.5	638.2	654.5
57.5°	487.2	503.5	550.1	597.4	614.5
60°	442.3	458.7	506.0	554.1	572.9
62.5°	395.0	413.8	465.2	511.7	532.9
65°	350.9	369.7	422.8	470.1	491.3
67.5°	304.4	326.4	379.5	429.3	450.5
70°	259.5	285.6	337.9	386.8	410.5
72.5°	219.5	240.8	295.4	346.9	366.4
75°	176.3	200.8	253.8	297.1	310.9
77.5°	139.6	160.8	211.4	239.9	248.9
80°	99.6	123.2	160.8	177.9	185.3
82.5°	66.1	85.7	109.4	112.6	111.0
85°	37.5	48.2	54.7	53.9	50.6
87.5°	14.7	16.3	12.2	7.3	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)