

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: P474650

Luminaire Tested: **24CZ2-130VHE-SQR-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474650
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-130VHE-SQR-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SQUARE LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12364.1 lumens
Efficiency: N/A
Efficacy: 134.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

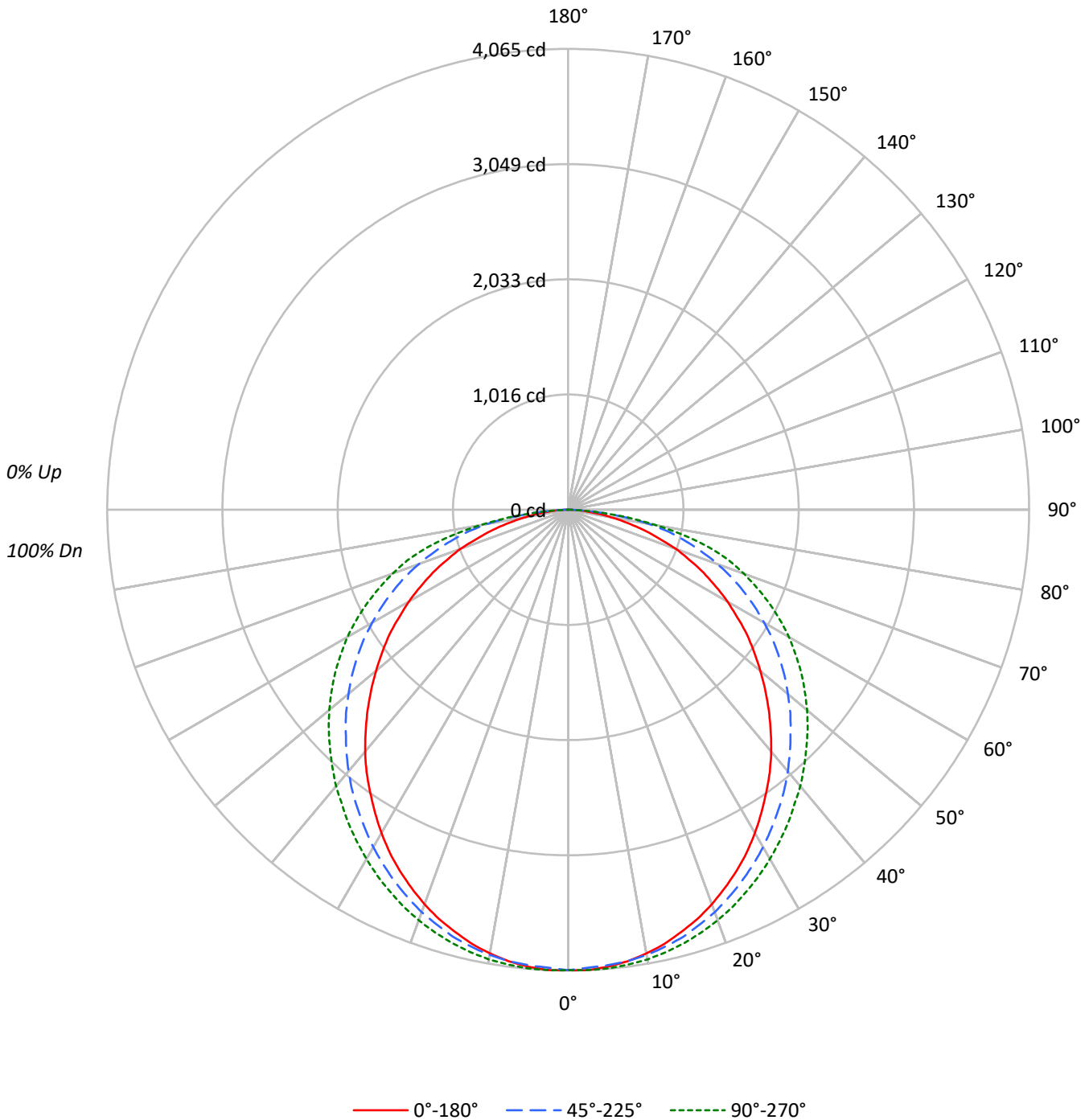
Input Watts (W): 92.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	81	75	84	78	73	80	76	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	53	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°	10929	10929	10929
5°	10928	10896	10970
10°	10860	10897	11005
15°	10742	10874	11022
20°	10606	10821	11036
25°	10434	10745	11038
30°	10232	10680	11054
35°	9999	10616	11096
40°	9784	10582	11186
45°	9517	10554	11306
50°	9262	10585	11511
55°	9045	10657	11769
60°	8739	10737	12098
65°	8389	10867	12464
70°	7957	11019	12962
75°	7126	11173	13390
80°	6000	11204	12153
85°	4452	8478	7991



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	384.9	3.1
10°-20°	1103.0	8.9
20°-30°	1669.7	13.5
30°-40°	2019.8	16.3
40°-50°	2132.1	17.2
50°-60°	2010.6	16.3
60°-70°	1657.6	13.4
70°-80°	1087.4	8.8
80°-90°	299.0	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°	3157.5	25.5
0°-40°	5177.4	41.9
0°-60°	9320.1	75.4
0°-90°	12364.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12364.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4061	4061	4061	4061	4061	
5°	4045	4045	4034	4061	4061	384
15°	3856	3878	3903	3949	3956	1088
25°	3514	3558	3619	3694	3718	1618
35°	3044	3123	3232	3342	3378	1906
45°	2501	2613	2773	2921	2971	1930
55°	1928	2064	2272	2442	2509	1717
65°	1318	1476	1707	1888	1958	1301
75°	685	861	1075	1244	1288	724
85°	144	249	275	267	259	179
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4061.2	4061.2	4061.2	4061.2	4061.2
2.5°	4065.1	4061.2	4043.4	4067.1	4065.1
5°	4045.4	4045.4	4033.5	4061.2	4061.2
7.5°	4017.7	4019.7	4015.8	4047.4	4047.4
10°	3974.3	3982.2	3988.1	4023.7	4027.6
12.5°	3922.9	3936.7	3948.6	3992.0	3996.0
15°	3855.8	3877.5	3903.2	3948.6	3956.5
17.5°	3786.6	3812.3	3840.0	3899.2	3909.1
20°	3703.7	3733.3	3778.7	3838.0	3853.8
22.5°	3610.8	3652.3	3699.7	3770.8	3790.6
25°	3514.0	3557.5	3618.7	3693.8	3717.5
27.5°	3409.3	3460.7	3529.8	3616.7	3642.4
30°	3292.8	3352.1	3437.0	3529.8	3557.5
32.5°	3170.3	3239.5	3334.3	3437.0	3468.6
35°	3043.9	3122.9	3231.6	3342.2	3377.7
37.5°	2919.5	2998.5	3126.9	3243.4	3277.0
40°	2785.1	2872.1	3012.3	3136.8	3184.2
42.5°	2642.9	2745.6	2893.8	3032.1	3077.5
45°	2500.7	2613.3	2773.3	2921.4	2970.8
47.5°	2356.5	2481.0	2656.8	2806.9	2864.2
50°	2212.3	2344.7	2528.4	2690.3	2749.6
52.5°	2066.1	2204.4	2403.9	2575.8	2629.1
55°	1927.9	2064.2	2271.6	2441.5	2508.6
57.5°	1767.9	1922.0	2141.2	2313.1	2378.2
60°	1623.7	1773.8	1995.0	2176.8	2247.9
62.5°	1467.6	1621.7	1854.8	2036.5	2105.7
65°	1317.5	1475.5	1706.6	1888.4	1957.5
67.5°	1155.5	1321.5	1558.5	1734.3	1801.5
70°	1011.3	1167.4	1400.5	1580.2	1647.4
72.5°	835.5	1013.3	1236.5	1414.3	1487.4
75°	685.4	861.2	1074.6	1244.4	1287.9
77.5°	527.4	703.2	914.6	1025.2	1054.8
80°	387.2	553.1	723.0	782.2	784.2
82.5°	260.7	406.9	503.7	533.3	529.4
85°	144.2	248.9	274.6	266.7	258.8
87.5°	59.3	83.0	67.2	47.4	37.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)