

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: P474632

Luminaire Tested: **24CZ2-30VHE-SQR-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474632
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30VHE-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: 2882.5 lumens
Efficiency: N/A
Efficacy: 140.6 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

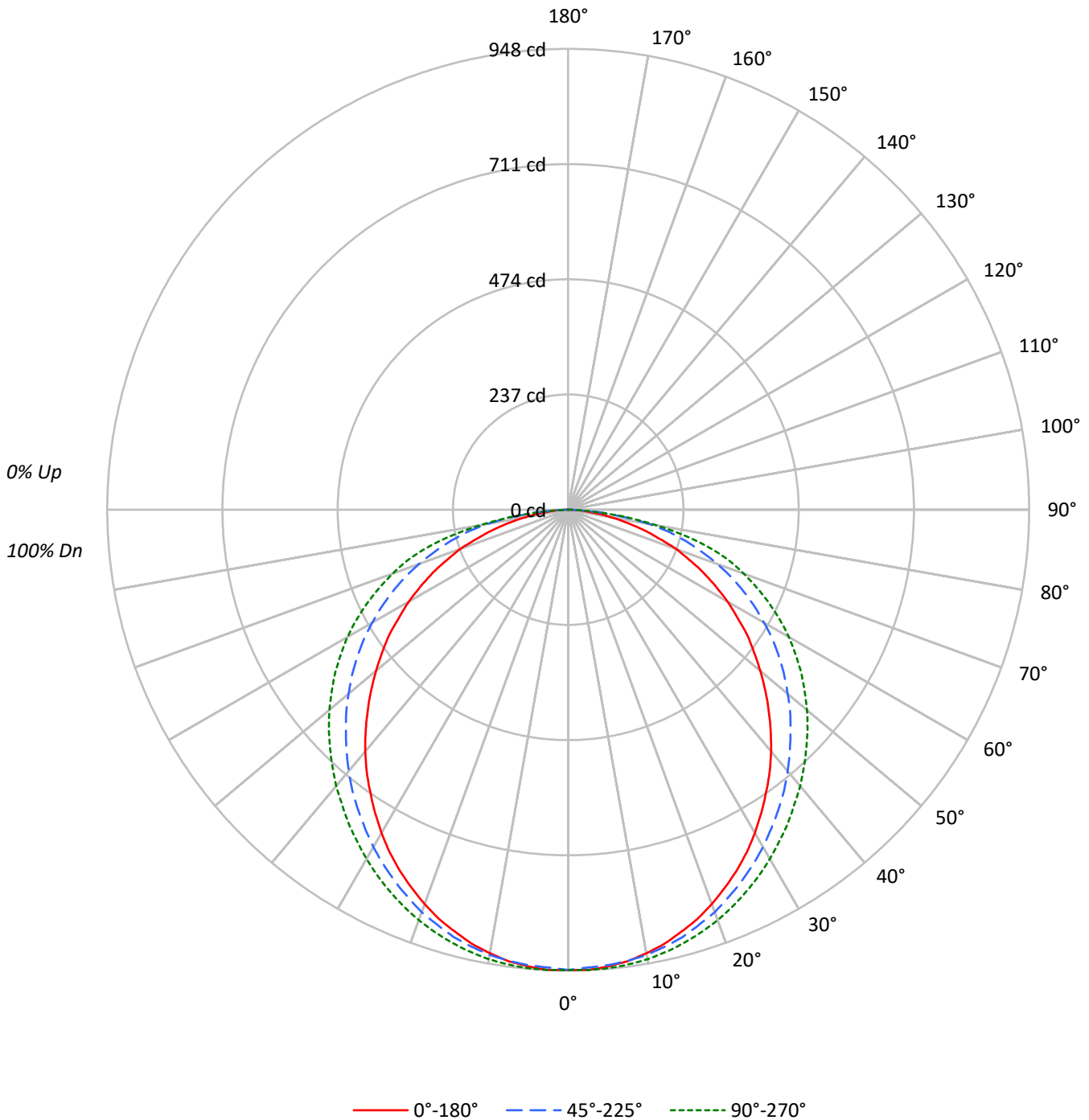
Input Watts (W): 20.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2548	2548	2548
5°	2548	2540	2558
10°	2532	2541	2566
15°	2504	2535	2570
20°	2473	2523	2573
25°	2432	2505	2573
30°	2385	2490	2577
35°	2331	2475	2587
40°	2281	2467	2608
45°	2219	2460	2636
50°	2159	2467	2683
55°	2109	2485	2744
60°	2037	2503	2821
65°	1956	2534	2906
70°	1855	2569	3022
75°	1661	2604	3121
80°	1399	2611	2833
85°	1037	1976	1862



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.7	3.1
10°-20°	257.1	8.9
20°-30°	389.3	13.5
30°-40°	470.9	16.3
40°-50°	497.1	17.2
50°-60°	468.7	16.3
60°-70°	386.4	13.4
70°-80°	253.5	8.8
80°-90°	69.7	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°	736.1	25.5
0°-40°	1207.0	41.9
0°-60°	2172.8	75.4
0°-90°	2882.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2882.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	947	947	947	947	947	
5°	943	943	940	947	947	90
15°	899	904	910	920	922	254
25°	819	829	844	861	867	377
35°	710	728	753	779	788	444
45°	583	609	646	681	693	450
55°	450	481	530	569	585	400
65°	307	344	398	440	456	303
75°	160	201	250	290	300	169
85°	34	58	64	62	60	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	946.8	946.8	946.8	946.8	946.8
2.5°	947.7	946.8	942.7	948.2	947.7
5°	943.1	943.1	940.4	946.8	946.8
7.5°	936.7	937.1	936.2	943.6	943.6
10°	926.5	928.4	929.8	938.0	939.0
12.5°	914.6	917.8	920.5	930.7	931.6
15°	898.9	904.0	910.0	920.5	922.4
17.5°	882.8	888.8	895.2	909.0	911.3
20°	863.4	870.4	880.9	894.8	898.4
22.5°	841.8	851.5	862.5	879.1	883.7
25°	819.2	829.4	843.6	861.1	866.7
27.5°	794.8	806.8	822.9	843.2	849.2
30°	767.7	781.5	801.3	822.9	829.4
32.5°	739.1	755.2	777.3	801.3	808.6
35°	709.6	728.1	753.4	779.2	787.5
37.5°	680.6	699.0	729.0	756.1	764.0
40°	649.3	669.6	702.3	731.3	742.3
42.5°	616.2	640.1	674.6	706.9	717.5
45°	583.0	609.2	646.5	681.1	692.6
47.5°	549.4	578.4	619.4	654.4	667.7
50°	515.8	546.6	589.4	627.2	641.0
52.5°	481.7	513.9	560.4	600.5	612.9
55°	449.5	481.2	529.6	569.2	584.8
57.5°	412.2	448.1	499.2	539.3	554.4
60°	378.5	413.5	465.1	507.5	524.1
62.5°	342.2	378.1	432.4	474.8	490.9
65°	307.2	344.0	397.9	440.2	456.4
67.5°	269.4	308.1	363.3	404.3	420.0
70°	235.8	272.2	326.5	368.4	384.1
72.5°	194.8	236.2	288.3	329.7	346.8
75°	159.8	200.8	250.5	290.1	300.2
77.5°	123.0	163.9	213.2	239.0	245.9
80°	90.3	128.9	168.5	182.4	182.8
82.5°	60.8	94.9	117.4	124.3	123.4
85°	33.6	58.0	64.0	62.2	60.3
87.5°	13.8	19.3	15.7	11.1	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)