

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: P474906

Luminaire Tested: **22CZ2-20-S-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474906  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-20-S-UNV-L835-CD1-U  
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

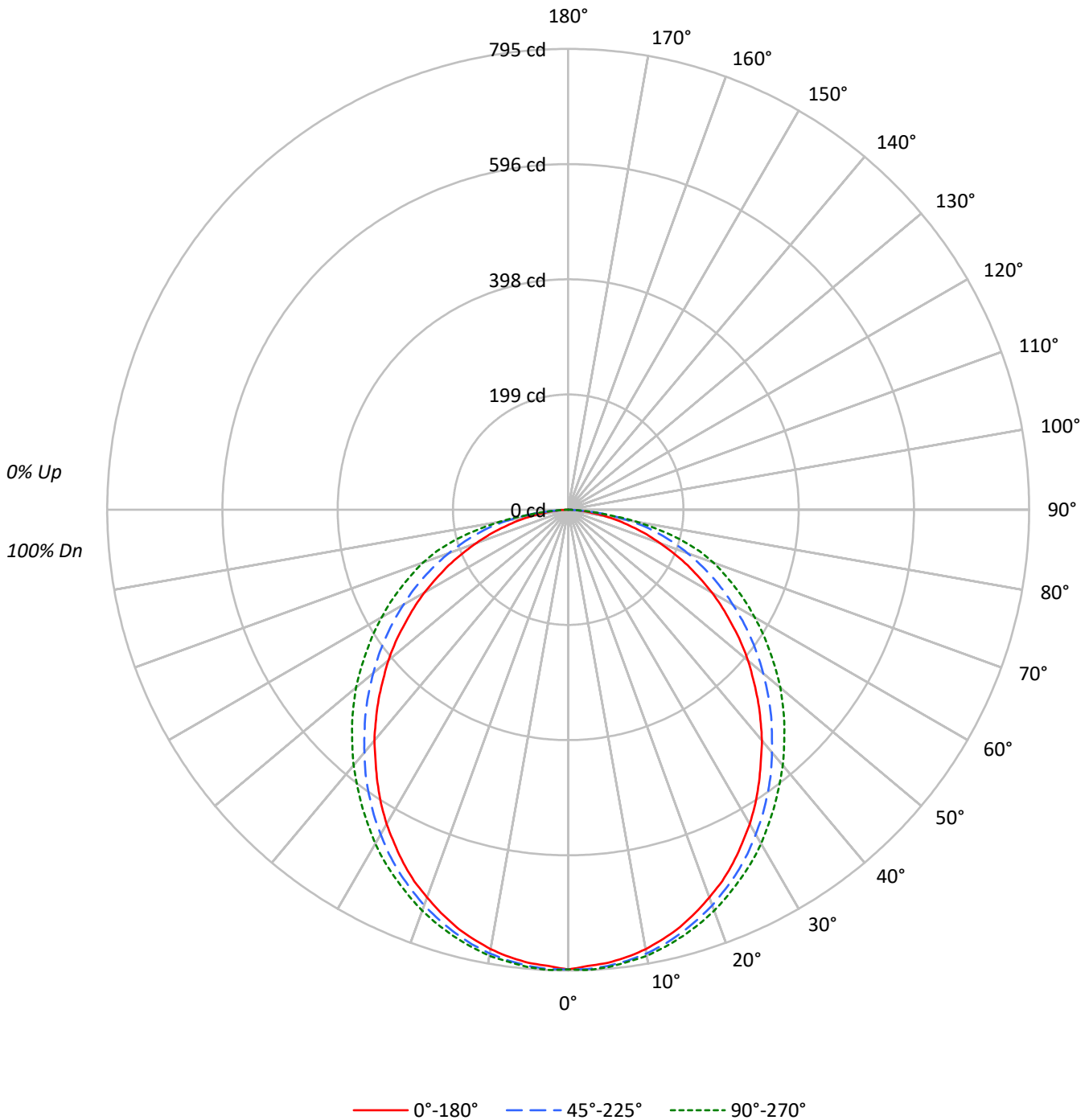
Lumens per Lamp: N/A  
Luminaire Lumens: 2185.0 lumens  
Efficiency: N/A  
Efficacy: 134.9 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.2  
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	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°	2134	2134	2134
5°	2120	2134	2140
10°	2104	2124	2135
15°	2077	2105	2123
20°	2038	2080	2108
25°	1997	2049	2086
30°	1945	2009	2067
35°	1885	1968	2041
40°	1826	1920	2023
45°	1759	1880	2006
50°	1696	1837	1999
55°	1615	1801	1990
60°	1542	1764	1998
65°	1448	1744	2027
70°	1323	1722	2093
75°	1187	1709	2095
80°	1000	1615	1860
85°	750	1093	1013



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.9	3.4
10°-20°	212.8	9.7
20°-30°	317.2	14.5
30°-40°	374.3	17.1
40°-50°	381.3	17.5
50°-60°	343.9	15.7
60°-70°	270.1	12.4
70°-80°	168.9	7.7
80°-90°	41.6	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°	604.9	27.7
0°-40°	979.1	44.8
0°-60°	1704.4	78.0
0°-90°	2185.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2185.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	793	793	793	793	793	
5°	785	786	790	792	792	74
15°	746	748	756	761	762	210
25°	673	676	690	700	703	309
35°	574	582	599	616	621	359
45°	462	470	494	518	527	357
55°	344	355	384	414	424	309
65°	227	240	274	305	318	225
75°	114	130	164	192	202	122
85°	24	31	35	35	33	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	793.1	793.1	793.1	793.1	793.1
2.5°	787.9	789.4	793.1	794.7	794.7
5°	784.7	786.3	790.0	791.6	792.1
7.5°	778.3	780.5	784.7	786.8	786.8
10°	769.9	772.5	777.3	780.5	781.5
12.5°	758.2	761.4	767.8	771.5	772.5
15°	745.6	748.2	755.6	760.9	761.9
17.5°	729.2	733.4	741.3	748.2	749.8
20°	711.7	716.5	726.5	734.4	736.0
22.5°	693.7	697.4	708.5	718.1	720.2
25°	672.6	676.3	690.0	700.1	702.7
27.5°	649.3	655.7	669.4	681.0	685.3
30°	626.1	632.4	646.7	660.4	665.2
32.5°	600.7	607.5	623.9	638.2	643.0
35°	573.7	581.6	599.1	615.5	621.3
37.5°	545.7	554.7	574.2	591.7	598.0
40°	519.8	526.1	546.7	566.8	575.8
42.5°	490.7	499.2	519.8	542.5	551.0
45°	462.1	470.1	493.9	517.7	527.2
47.5°	432.5	442.6	466.4	492.8	502.3
50°	405.0	413.5	438.9	466.9	477.5
52.5°	375.4	384.4	411.9	441.0	450.5
55°	344.2	355.3	383.9	413.5	424.1
57.5°	315.7	326.2	356.4	387.1	398.2
60°	286.6	297.2	327.8	359.0	371.2
62.5°	255.9	268.1	301.4	331.5	345.3
65°	227.4	239.5	273.9	304.6	318.3
67.5°	197.2	211.5	245.9	278.1	291.9
70°	168.1	185.1	218.9	250.6	266.0
72.5°	142.2	156.0	191.4	224.7	237.4
75°	114.2	130.1	164.4	192.5	201.5
77.5°	90.4	104.2	136.9	155.5	161.3
80°	64.5	79.8	104.2	115.3	120.0
82.5°	42.8	55.5	70.9	73.0	71.9
85°	24.3	31.2	35.4	34.9	32.8
87.5°	9.5	10.6	7.9	4.8	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)