

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: P476023

Luminaire Tested: **22GR-LD5-85-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476023
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-85-A19/156-UNV-L850-CD1-U
Description: GR 2'X2' LED TROFFER w/ A19/156 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8280.8 lumens
Efficiency: N/A
Efficacy: 127.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.22 / 1.23
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

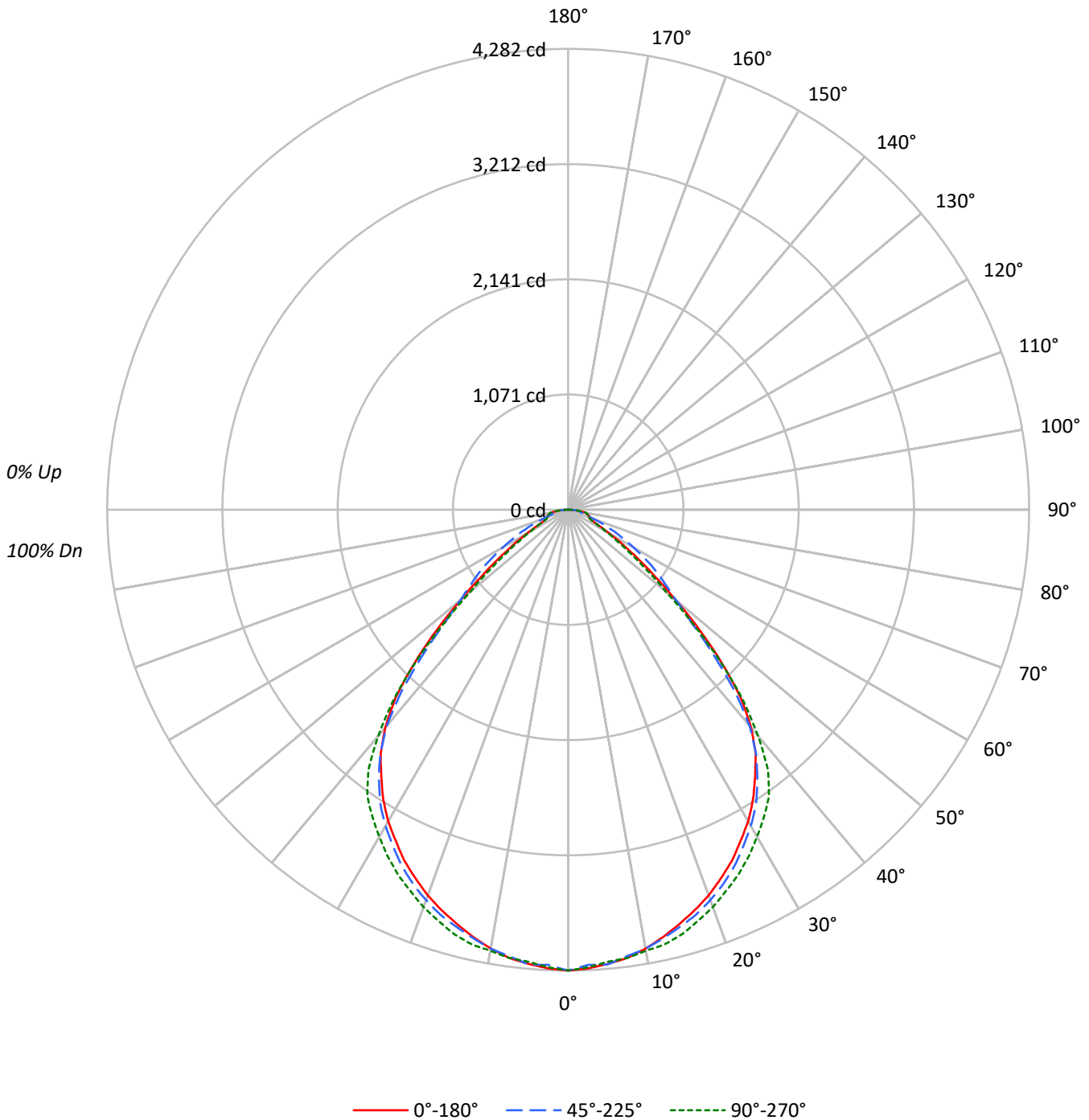
Input Watts (W): 64.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	111	107	103	100	108	105	101	99	100	98	95	97	95	93	93	91	90	88					88			
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	82	79	77					77			
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68					68			
4	88	78	70	65	86	77	70	64	74	68	63	72	67	63	70	65	62	60					60			
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53					53			
6	76	65	57	51	75	64	56	51	62	55	50	60	54	50	59	54	50	48					48			
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43					43			
8	67	54	47	41	65	54	46	41	53	46	41	51	45	41	50	45	41	39					39			
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36					36			
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11523	11523	11523
5°	11442	11455	11391
10°	11314	11318	11370
15°	11106	11181	11380
20°	10919	11056	11252
25°	10685	10850	11105
30°	10386	10545	10905
35°	9942	10067	10683
40°	9280	9207	9637
45°	7706	7271	7640
50°	5430	5457	4977
55°	3646	4691	3281
60°	2352	3764	2181
65°	1629	2915	1569
70°	1638	1988	1626
75°	2016	1553	1999
80°	2462	1798	2611
85°	2405	2455	2649



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	400.9	4.8
10°-20°	1134.9	13.7
20°-30°	1683.0	20.3
30°-40°	1925.2	23.2
40°-50°	1524.0	18.4
50°-60°	831.6	10.0
60°-70°	435.1	5.3
70°-80°	251.2	3.0
80°-90°	95.0	1.1
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°	3218.8	38.9
0°-40°	5144.0	62.1
0°-60°	7499.5	90.6
0°-90°	8280.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8280.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4282	4282	4282	4282	4282	
5°	4236	4206	4241	4226	4217	402
15°	3986	4007	4013	4045	4085	1124
25°	3598	3603	3654	3700	3740	1654
35°	3026	3026	3064	3176	3252	1888
45°	2025	2014	1910	2004	2008	1540
55°	777	971	1000	931	699	721
65°	256	515	458	490	246	276
75°	194	310	149	305	192	201
85°	78	102	80	103	86	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4282.0	4282.0	4282.0	4282.0	4282.0
2.5°	4266.1	4240.7	4234.3	4247.0	4255.0
5°	4235.9	4205.7	4240.7	4226.4	4216.8
7.5°	4200.9	4189.8	4183.5	4205.7	4200.9
10°	4140.5	4124.6	4142.1	4154.8	4161.2
12.5°	4067.4	4075.4	4078.5	4118.3	4137.4
15°	3986.4	4007.0	4013.4	4045.2	4084.9
17.5°	3903.7	3908.5	3946.6	3987.9	4007.0
20°	3813.1	3821.1	3860.8	3898.9	3929.1
22.5°	3706.6	3716.2	3765.4	3808.3	3833.8
25°	3598.5	3603.3	3654.2	3700.3	3740.0
27.5°	3468.2	3493.6	3523.8	3587.4	3630.3
30°	3342.6	3358.5	3393.5	3463.4	3509.5
32.5°	3194.8	3201.2	3245.7	3322.0	3384.0
35°	3026.3	3026.3	3064.5	3175.7	3252.0
37.5°	2859.4	2837.2	2867.4	2994.5	3048.6
40°	2641.7	2625.8	2621.0	2708.4	2743.4
42.5°	2374.6	2344.4	2290.4	2379.4	2408.0
45°	2025.0	2013.8	1910.5	2004.3	2007.5
47.5°	1659.4	1667.3	1551.3	1645.1	1575.2
50°	1297.0	1379.6	1303.4	1343.1	1188.9
52.5°	1009.3	1163.5	1134.9	1119.0	909.2
55°	777.2	971.2	999.8	931.4	699.4
57.5°	592.9	828.1	845.6	797.9	532.5
60°	437.1	699.4	699.4	677.1	405.3
62.5°	325.8	600.8	569.0	575.4	309.9
65°	255.9	515.0	457.8	489.6	246.4
67.5°	214.6	429.2	346.5	422.8	214.6
70°	208.2	373.5	252.7	381.5	206.6
72.5°	206.6	343.3	189.1	346.5	208.2
75°	193.9	309.9	149.4	305.2	192.3
77.5°	178.0	257.5	124.0	257.5	179.6
80°	158.9	195.5	116.0	200.3	168.5
82.5°	122.4	139.9	103.3	141.5	130.3
85°	77.9	101.7	79.5	103.3	85.8
87.5°	35.0	54.0	35.0	55.6	38.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)