

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: P476265

Luminaire Tested: **14GR-LD5-43-A19/156-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476265
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-43-A19/156-UNV-L840-CD1-U
Description: GR 1'X4' LED TROFFER w/ A19/156 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4193.5 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.2
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

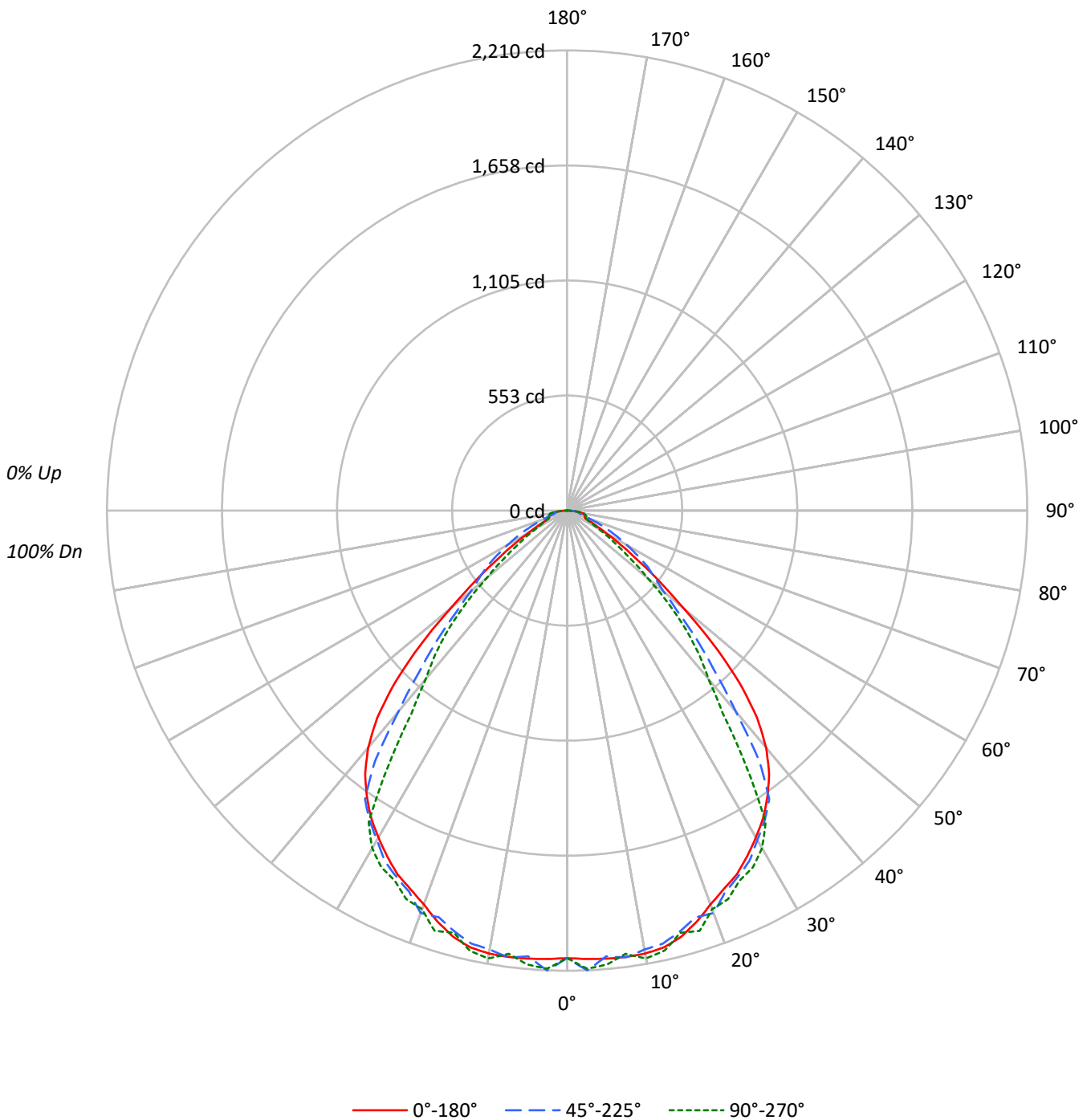
Input Watts (W): 33
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78					78			
3	96	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68					68			
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61					61			
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54					54			
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49					49			
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44					44			
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40					40			
9	63	51	44	39	62	51	43	39	49	43	38	48	43	38	48	42	38	36					36			
10	60	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5783	5783	5783
5°	5835	5805	5912
10°	5902	5848	5968
15°	5901	5828	5846
20°	5764	5890	5833
25°	5722	5762	5820
30°	5634	5675	5818
35°	5509	5560	4932
40°	5220	4426	3709
45°	4453	3375	3074
50°	3042	2527	2123
55°	1916	2214	1411
60°	1158	1772	910
65°	727	1370	699
70°	725	915	743
75°	913	730	959
80°	1190	885	1258
85°	1152	1220	1220



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.3	4.9
10°-20°	594.3	14.2
20°-30°	896.9	21.4
30°-40°	1000.4	23.9
40°-50°	727.5	17.3
50°-60°	399.0	9.5
60°-70°	202.9	4.8
70°-80°	119.3	2.8
80°-90°	46.1	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°	1698.5	40.5
0°-40°	2698.9	64.4
0°-60°	3825.3	91.2
0°-90°	4193.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4193.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2149	2149	2149	2149	2149	
5°	2160	2206	2149	2188	2188	206
15°	2118	2110	2092	2136	2098	595
25°	1927	1927	1940	1978	1960	886
35°	1677	1675	1692	1578	1501	1044
45°	1170	1080	887	823	808	879
55°	408	505	472	422	301	385
65°	114	244	215	222	110	127
75°	88	156	70	140	92	91
85°	37	48	40	50	40	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2149.0	2149.0	2149.0	2149.0	2149.0
2.5°	2155.6	2199.5	2210.5	2210.5	2201.7
5°	2160.0	2206.1	2149.0	2188.5	2188.5
7.5°	2162.2	2168.8	2164.4	2173.1	2146.8
10°	2160.0	2144.6	2140.2	2195.1	2184.1
12.5°	2149.0	2089.7	2129.2	2111.7	2164.4
15°	2118.3	2109.5	2091.9	2135.8	2098.5
17.5°	2070.0	2074.4	2048.0	2070.0	2116.1
20°	2012.9	2032.7	2056.8	2063.4	2037.0
22.5°	1966.8	1973.4	1982.2	2004.1	2019.5
25°	1927.3	1927.3	1940.5	1977.8	1960.2
27.5°	1872.4	1876.8	1896.6	1907.5	1931.7
30°	1813.1	1817.5	1826.3	1876.8	1872.4
32.5°	1751.7	1756.1	1764.9	1797.8	1773.6
35°	1677.0	1674.9	1692.4	1578.3	1501.4
37.5°	1593.6	1591.4	1514.6	1299.5	1227.1
40°	1486.1	1477.3	1260.0	1091.0	1055.8
42.5°	1350.0	1312.7	1053.6	954.9	937.3
45°	1170.0	1080.0	886.8	823.2	807.8
47.5°	957.1	889.0	722.2	693.6	656.3
50°	726.6	731.0	603.7	583.9	507.1
52.5°	555.4	608.0	531.2	493.9	392.9
55°	408.3	504.9	471.9	421.5	300.7
57.5°	302.9	419.3	399.5	362.2	230.5
60°	215.1	349.0	329.3	311.7	169.0
62.5°	155.9	291.9	270.0	263.4	129.5
65°	114.1	243.7	215.1	221.7	109.8
67.5°	92.2	204.1	162.4	193.2	94.4
70°	92.2	182.2	116.3	171.2	94.4
72.5°	92.2	171.2	92.2	155.9	98.8
75°	87.8	155.9	70.2	140.5	92.2
77.5°	81.2	127.3	59.3	120.7	87.8
80°	76.8	94.4	57.1	94.4	81.2
82.5°	59.3	65.9	52.7	70.2	63.7
85°	37.3	48.3	39.5	50.5	39.5
87.5°	17.6	26.3	17.6	26.3	17.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)