

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: P476262

Luminaire Tested: **14GR-LD5-32-A19/156-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476262
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-32-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: 3148.8 lumens
Efficiency: N/A
Efficacy: 126.0 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

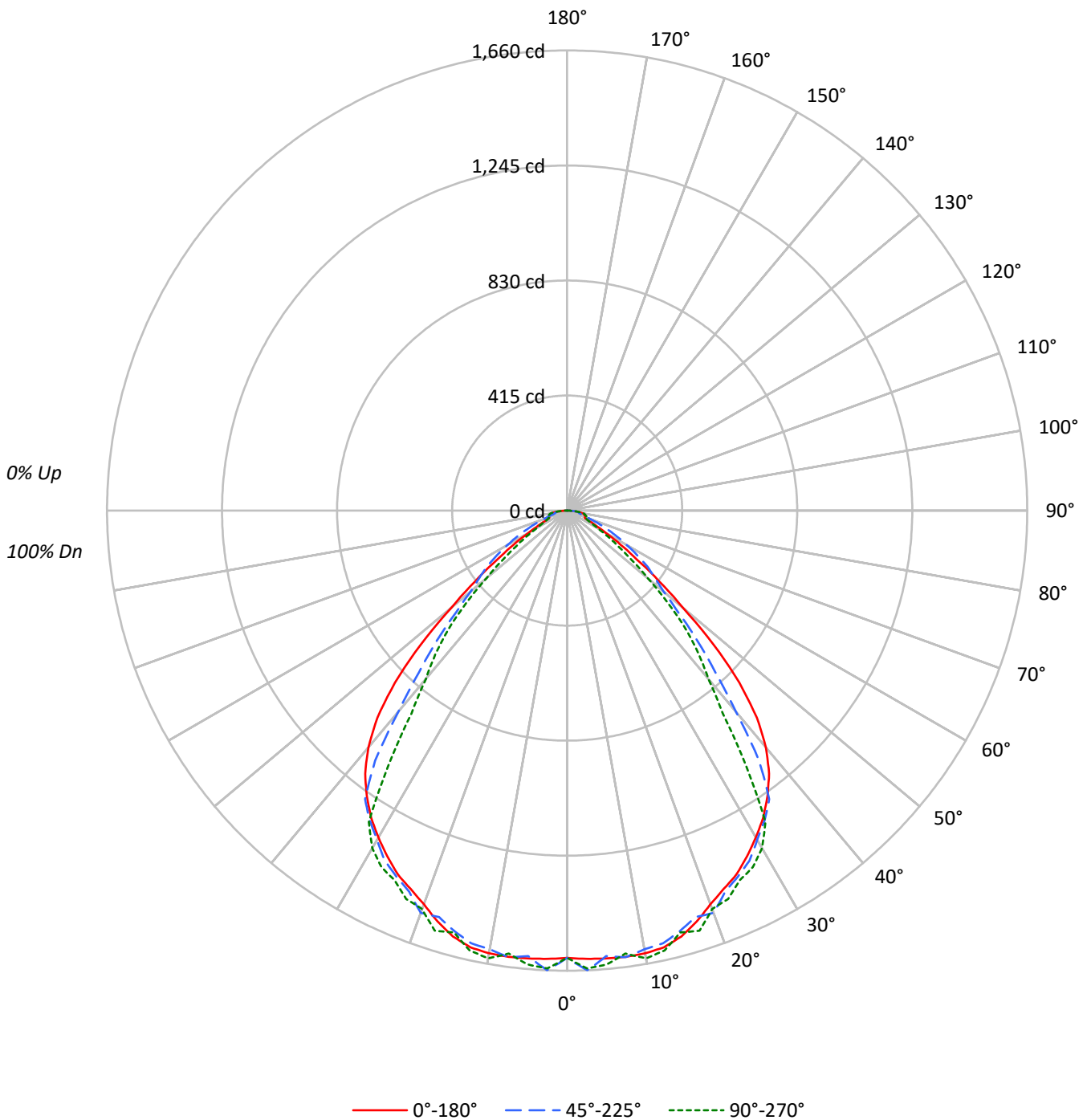
Input Watts (W): 25
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	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°	4342	4342	4342
5°	4381	4359	4439
10°	4432	4391	4481
15°	4431	4376	4390
20°	4328	4423	4380
25°	4297	4326	4370
30°	4230	4261	4369
35°	4137	4175	3704
40°	3920	3323	2785
45°	3343	2534	2308
50°	2284	1898	1594
55°	1438	1663	1059
60°	869	1330	683
65°	546	1028	525
70°	544	688	558
75°	685	548	719
80°	894	665	945
85°	865	917	917



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.7	4.9
10°-20°	446.2	14.2
20°-30°	673.5	21.4
30°-40°	751.1	23.9
40°-50°	546.2	17.3
50°-60°	299.6	9.5
60°-70°	152.3	4.8
70°-80°	89.5	2.8
80°-90°	34.6	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°	1275.3	40.5
0°-40°	2026.5	64.4
0°-60°	2872.3	91.2
0°-90°	3148.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3148.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1614	1614	1614	1614	1614	
5°	1622	1656	1614	1643	1643	155
15°	1590	1584	1571	1604	1576	447
25°	1447	1447	1457	1485	1472	665
35°	1259	1258	1271	1185	1127	784
45°	878	811	666	618	606	660
55°	307	379	354	316	226	289
65°	86	183	162	166	82	95
75°	66	117	53	106	69	69
85°	28	36	30	38	30	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1613.6	1613.6	1613.6	1613.6	1613.6
2.5°	1618.6	1651.5	1659.8	1659.8	1653.2
5°	1621.8	1656.5	1613.6	1643.3	1643.3
7.5°	1623.5	1628.4	1625.1	1631.7	1612.0
10°	1621.8	1610.3	1607.0	1648.2	1640.0
12.5°	1613.6	1569.1	1598.8	1585.6	1625.1
15°	1590.5	1583.9	1570.8	1603.7	1575.7
17.5°	1554.3	1557.6	1537.8	1554.3	1588.9
20°	1511.4	1526.3	1544.4	1549.3	1529.5
22.5°	1476.8	1481.7	1488.3	1504.8	1516.4
25°	1447.1	1447.1	1457.0	1485.0	1471.9
27.5°	1405.9	1409.2	1424.1	1432.3	1450.4
30°	1361.4	1364.7	1371.3	1409.2	1405.9
32.5°	1315.3	1318.6	1325.2	1349.9	1331.8
35°	1259.2	1257.6	1270.8	1185.1	1127.4
37.5°	1196.6	1195.0	1137.3	975.7	921.4
40°	1115.8	1109.3	946.1	819.2	792.8
42.5°	1013.7	985.6	791.1	717.0	703.8
45°	878.5	810.9	665.9	618.1	606.5
47.5°	718.6	667.5	542.3	520.8	492.8
50°	545.6	548.9	453.3	438.4	380.7
52.5°	417.0	456.6	398.9	370.8	295.0
55°	306.6	379.1	354.4	316.5	225.8
57.5°	227.5	314.8	300.0	272.0	173.1
60°	161.5	262.1	247.2	234.0	126.9
62.5°	117.0	219.2	202.7	197.8	97.2
65°	85.7	183.0	161.5	166.5	82.4
67.5°	69.2	153.3	122.0	145.0	70.9
70°	69.2	136.8	87.4	128.6	70.9
72.5°	69.2	128.6	69.2	117.0	74.2
75°	65.9	117.0	52.7	105.5	69.2
77.5°	61.0	95.6	44.5	90.7	65.9
80°	57.7	70.9	42.9	70.9	61.0
82.5°	44.5	49.4	39.6	52.7	47.8
85°	28.0	36.3	29.7	37.9	29.7
87.5°	13.2	19.8	13.2	19.8	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)