

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: P291400

Luminaire Tested: **14GR-LD5-28-A19/156-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291400
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-28-A19/156-UNV-L82765-W2A1-U-5500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2913.0 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

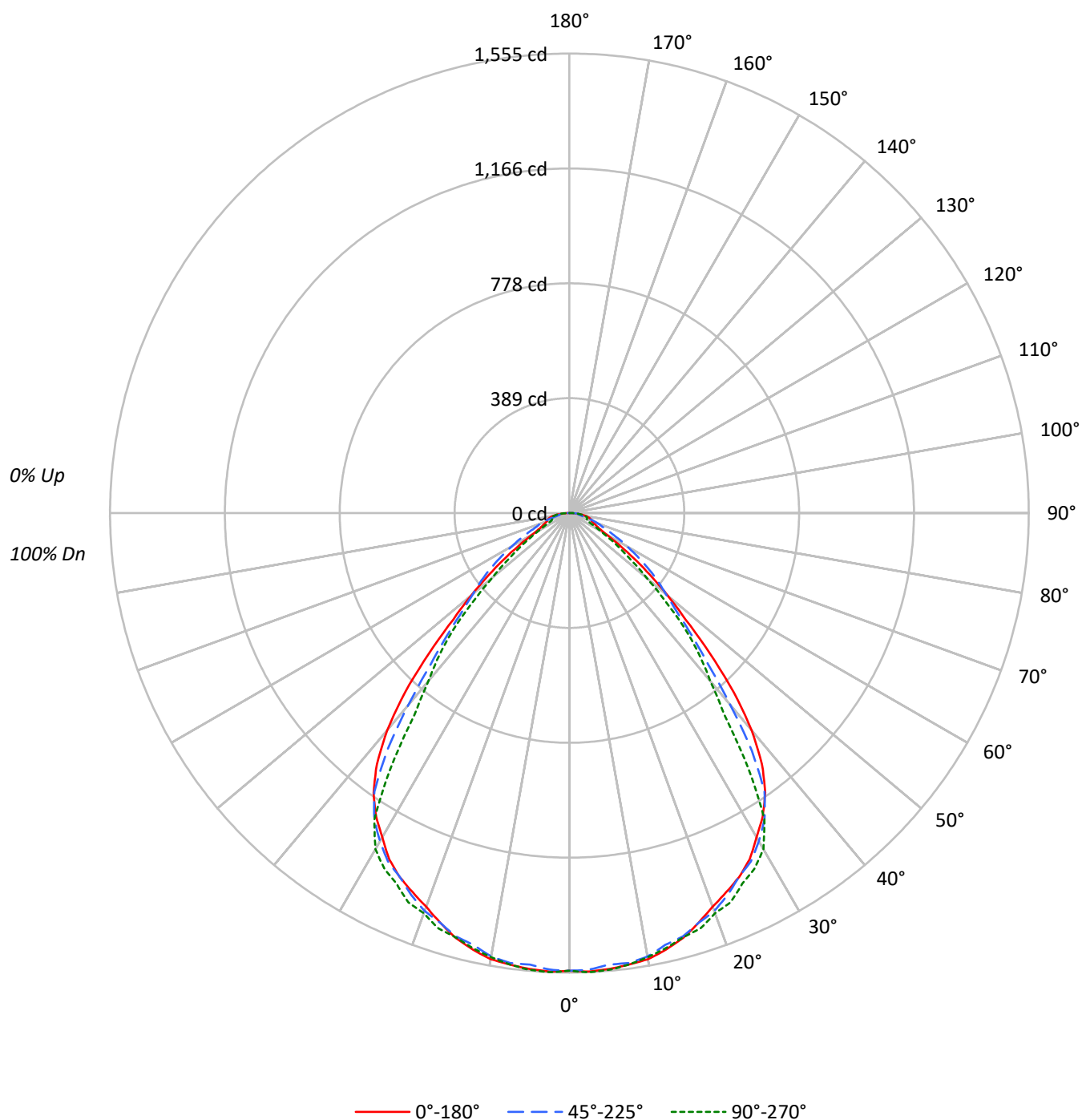
Input Watts (W): 22.878
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291400

CATALOG NUMBER: 14GR-LD5-28-A19/156-UNV-L82765-W2A1-U-5500K

Luminous Intensity Polar Plot





TEST NUMBER: P291400

CATALOG NUMBER: 14GR-LD5-28-A19/156-UNV-L82765-W2A1-U-5500K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	111	107	104	100	108	105	102	99		101	98	96			97	95	93			93
2	103	96	90	86	100	94	89	85		91	87	83			88	84	81			85
3	95	87	80	74	93	85	79	74		82	77	73			80	75	71			77
4	89	79	71	65	87	77	70	65		75	69	64			73	68	63			71
5	83	71	64	58	81	70	63	58		68	62	57			67	61	57			65
6	77	65	58	52	75	64	57	52		63	56	51			61	55	51			60
7	72	60	52	47	70	59	52	47		58	51	46			56	51	46			55
8	67	55	48	43	66	55	47	42		53	47	42			52	46	42			51
9	63	51	44	39	62	51	44	39		50	43	39			49	43	38			48
10	60	48	40	36	58	47	40	36		46	40	35			45	39	35			44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4168	4168	4168
5°	4183	4143	4192
10°	4189	4163	4171
15°	4146	4131	4141
20°	4060	4104	4127
25°	4035	4033	4110
30°	3937	3984	4082
35°	3796	3781	3474
40°	3371	2975	2605
45°	2558	2226	2106
50°	1814	1781	1429
55°	1242	1521	982
60°	768	1213	657
65°	633	934	476
70°	629	814	488
75°	756	582	652
80°	868	538	817
85°	824	948	926



TEST NUMBER: P291400

CATALOG NUMBER: 14GR-LD5-28-A19/156-UNV-L82765-W2A1-U-5500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.0	5.0
10°-20°	419.5	14.4
20°-30°	630.9	21.7
30°-40°	687.7	23.6
40°-50°	481.6	16.5
50°-60°	272.6	9.4
60°-70°	149.2	5.1
70°-80°	90.4	3.1
80°-90°	34.3	1.2
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°	1197.3	41.1
0°-40°	1885.0	64.7
0°-60°	2639.2	90.6
0°-90°	2913.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2913.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1549	1549	1549	1549	1549	
5°	1548	1546	1534	1552	1552	147
15°	1488	1484	1483	1504	1486	419
25°	1359	1362	1358	1390	1384	624
35°	1156	1150	1151	1092	1058	712
45°	672	702	585	578	554	522
55°	265	317	324	321	209	242
65°	99	163	147	185	75	102
75°	73	105	56	110	63	75
85°	27	43	31	37	30	30
90°	0	0	0	0	0	



TEST NUMBER: P291400

CATALOG NUMBER: 14GR-LD5-28-A19/156-UNV-L82765-W2A1-U-5500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1549.0	1549.0	1549.0	1549.0	1549.0
2.5°	1553.0	1551.0	1546.4	1555.7	1555.0
5°	1548.4	1545.7	1533.7	1551.7	1551.7
7.5°	1541.7	1535.0	1535.7	1545.7	1541.0
10°	1533.0	1521.7	1523.7	1526.3	1526.3
12.5°	1513.0	1502.3	1497.0	1505.7	1508.3
15°	1488.3	1484.3	1483.0	1504.3	1486.3
17.5°	1453.7	1462.3	1454.3	1471.7	1474.3
20°	1417.7	1434.3	1433.0	1445.0	1441.0
22.5°	1388.3	1399.0	1399.0	1413.7	1425.7
25°	1359.0	1361.6	1358.3	1389.7	1384.3
27.5°	1321.0	1319.0	1329.6	1345.6	1356.3
30°	1267.0	1267.6	1282.3	1303.6	1313.6
32.5°	1217.6	1211.6	1229.6	1238.9	1228.3
35°	1155.6	1150.3	1150.9	1092.2	1057.6
37.5°	1070.9	1075.6	1014.2	906.9	861.5
40°	959.6	968.9	846.9	766.8	741.5
42.5°	824.9	827.5	694.2	668.2	651.5
45°	672.2	701.5	584.8	577.5	553.5
47.5°	532.8	587.5	490.1	494.8	437.4
50°	433.4	488.1	425.4	427.4	341.4
52.5°	342.7	396.1	375.4	369.4	268.1
55°	264.7	316.7	324.1	321.4	209.4
57.5°	194.7	250.7	272.1	282.1	161.4
60°	142.7	204.7	225.4	245.4	122.0
62.5°	113.4	177.4	184.7	214.0	94.7
65°	99.4	163.4	146.7	185.4	74.7
67.5°	88.7	155.4	119.4	164.0	65.3
70°	80.0	140.0	103.4	146.7	62.0
72.5°	80.0	122.7	81.4	130.0	62.7
75°	72.7	104.7	56.0	110.0	62.7
77.5°	64.7	89.4	42.0	89.4	58.7
80°	56.0	70.0	34.7	68.7	52.7
82.5°	41.3	52.7	30.0	51.3	42.7
85°	26.7	43.3	30.7	37.3	30.0
87.5°	12.7	22.0	19.3	18.7	15.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)