

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: P475982

Luminaire Tested: **22GR-LD5-40-A19/156-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475982
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-40-A19/156-UNV-L830-CD1-U
Description: GR 2'X2' LED TROFFER w/ A19/156 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3769.5 lumens
Efficiency: N/A
Efficacy: 116.3 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

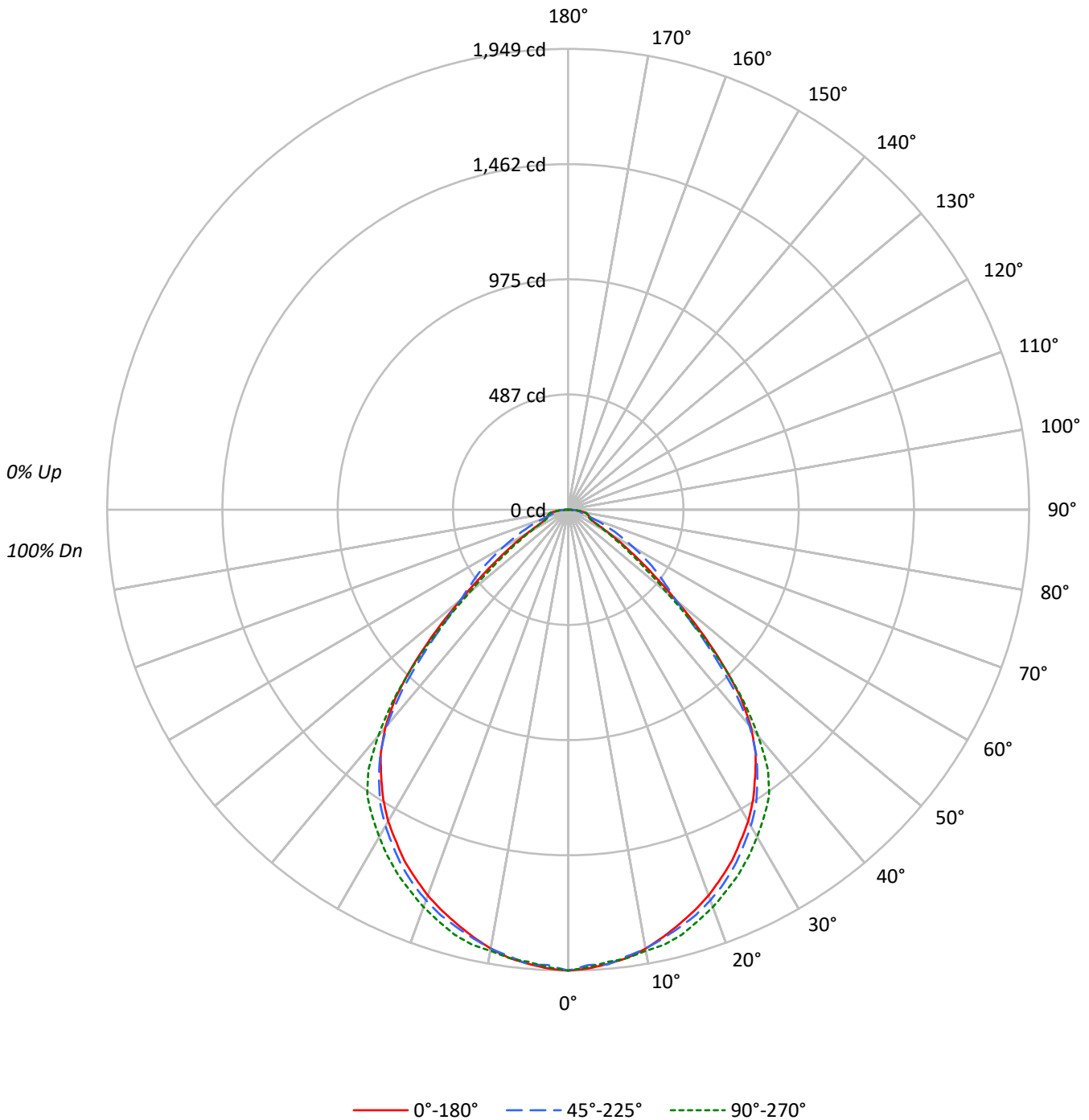
Input Watts (W): 32.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5245	5245	5245
5°	5209	5215	5185
10°	5150	5152	5176
15°	5056	5090	5180
20°	4971	5033	5122
25°	4864	4939	5055
30°	4728	4800	4964
35°	4526	4583	4863
40°	4224	4191	4387
45°	3508	3310	3478
50°	2472	2484	2266
55°	1660	2135	1494
60°	1071	1714	993
65°	742	1327	714
70°	746	905	740
75°	918	707	910
80°	1122	818	1189
85°	1096	1118	1207



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.5	4.8
10°-20°	516.6	13.7
20°-30°	766.1	20.3
30°-40°	876.4	23.2
40°-50°	693.7	18.4
50°-60°	378.5	10.0
60°-70°	198.0	5.3
70°-80°	114.3	3.0
80°-90°	43.2	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°	1465.2	38.9
0°-40°	2341.6	62.1
0°-60°	3413.9	90.6
0°-90°	3769.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3769.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1949	1949	1949	1949	1949	
5°	1928	1914	1930	1924	1920	183
15°	1815	1824	1827	1841	1860	512
25°	1638	1640	1663	1684	1702	753
35°	1378	1378	1395	1446	1480	859
45°	922	917	870	912	914	701
55°	354	442	455	424	318	328
65°	116	234	208	223	112	126
75°	88	141	68	139	88	92
85°	36	46	36	47	39	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1949.2	1949.2	1949.2	1949.2	1949.2
2.5°	1942.0	1930.4	1927.5	1933.3	1936.9
5°	1928.3	1914.5	1930.4	1923.9	1919.6
7.5°	1912.3	1907.3	1904.4	1914.5	1912.3
10°	1884.8	1877.6	1885.6	1891.3	1894.2
12.5°	1851.6	1855.2	1856.6	1874.7	1883.4
15°	1814.7	1824.1	1827.0	1841.4	1859.5
17.5°	1777.0	1779.2	1796.6	1815.4	1824.1
20°	1735.8	1739.4	1757.5	1774.9	1788.6
22.5°	1687.3	1691.7	1714.1	1733.6	1745.2
25°	1638.1	1640.3	1663.4	1684.4	1702.5
27.5°	1578.8	1590.4	1604.1	1633.0	1652.6
30°	1521.6	1528.9	1544.8	1576.6	1597.6
32.5°	1454.3	1457.2	1477.5	1512.2	1540.4
35°	1377.6	1377.6	1395.0	1445.6	1480.4
37.5°	1301.7	1291.5	1305.3	1363.2	1387.8
40°	1202.5	1195.3	1193.1	1232.9	1248.8
42.5°	1081.0	1067.2	1042.6	1083.1	1096.2
45°	921.8	916.7	869.7	912.4	913.8
47.5°	755.4	759.0	706.2	748.9	717.0
50°	590.4	628.0	593.3	611.4	541.2
52.5°	459.5	529.6	516.6	509.4	413.9
55°	353.8	442.1	455.1	424.0	318.4
57.5°	269.9	377.0	384.9	363.2	242.4
60°	199.0	318.4	318.4	308.2	184.5
62.5°	148.3	273.5	259.0	261.9	141.1
65°	116.5	234.4	208.4	222.9	112.1
67.5°	97.7	195.4	157.7	192.5	97.7
70°	94.8	170.0	115.0	173.7	94.1
72.5°	94.1	156.3	86.1	157.7	94.8
75°	88.3	141.1	68.0	138.9	87.5
77.5°	81.0	117.2	56.4	117.2	81.8
80°	72.4	89.0	52.8	91.2	76.7
82.5°	55.7	63.7	47.0	64.4	59.3
85°	35.5	46.3	36.2	47.0	39.1
87.5°	15.9	24.6	15.9	25.3	17.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)