

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: LUMARK

Report Number: P143919

Luminaire Tested: **LDRL-5WQ-E01-E-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P143919
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33698)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: LDRL-5WQ-E01-E-7030
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (21) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2799.9 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G1

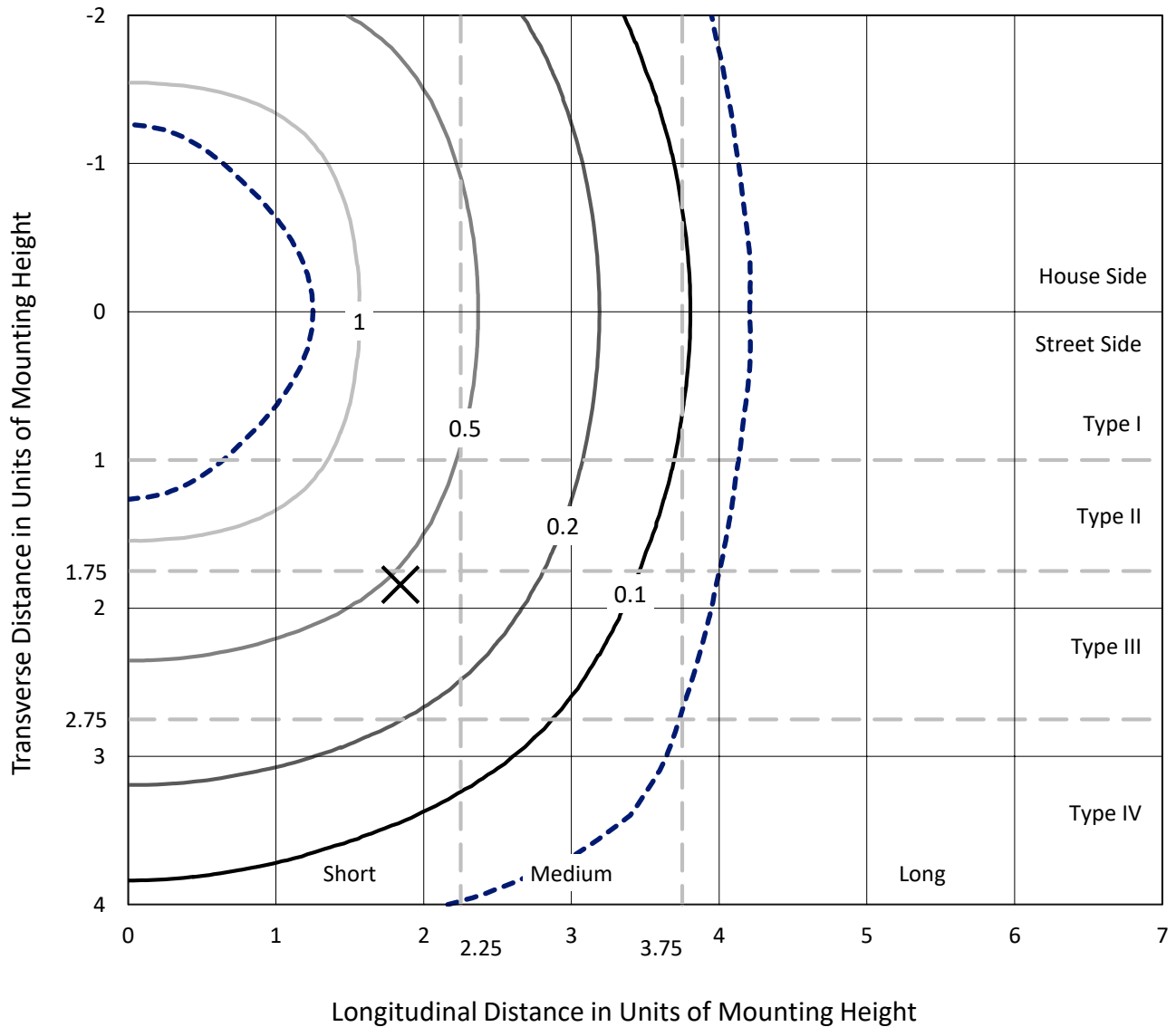
Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P143919
 CATALOG NUMBER: LDRL-5WQ-E01-E-7030

Iso-Footcandle Lines of Horizontal Illumination

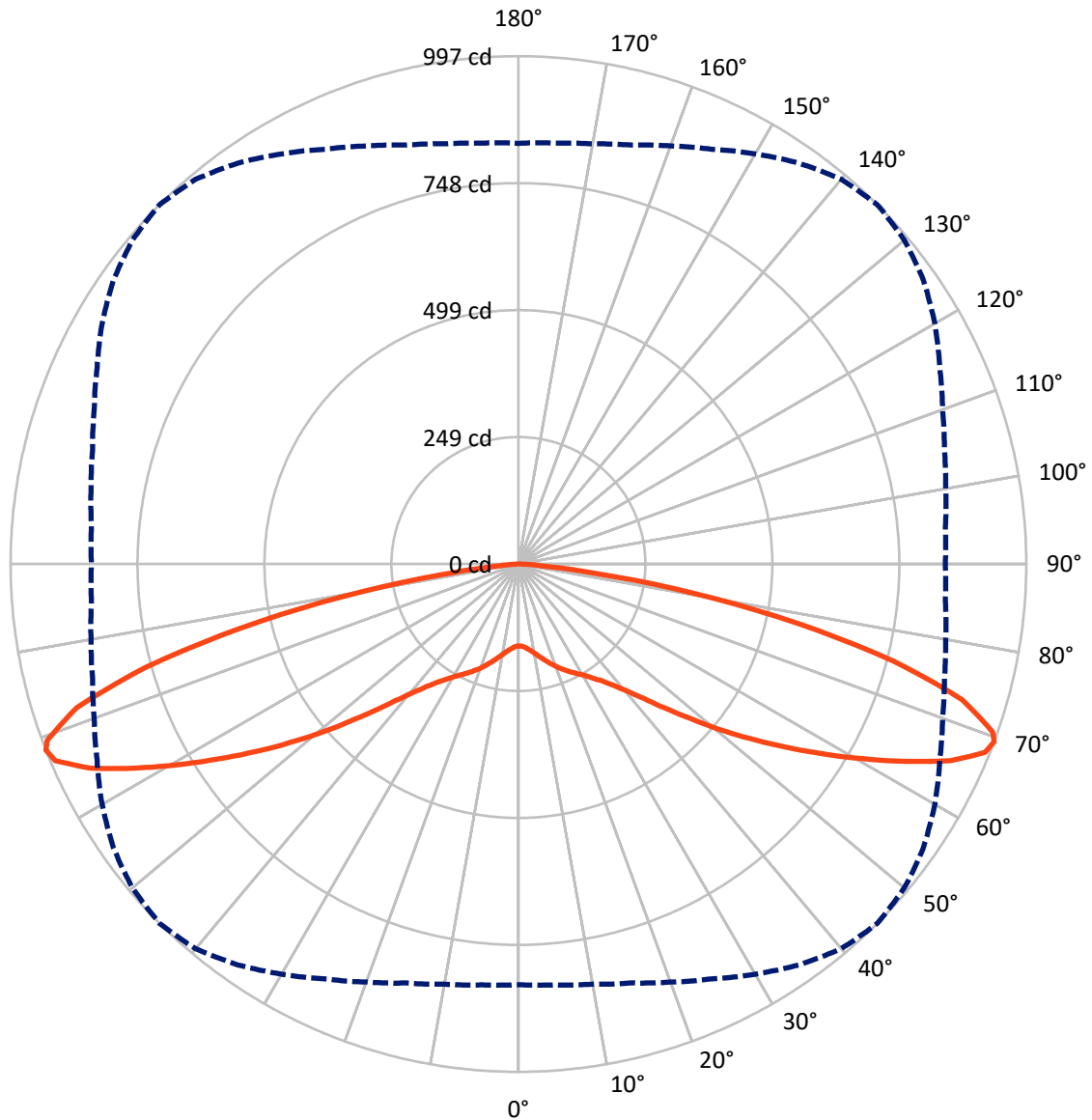
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.8 fc
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P143919
CATALOG NUMBER: LDRL-5WQ-E01-E-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P143919

CATALOG NUMBER: LDRL-5WQ-E01-E-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1400.0	0.0	1400.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1400.0	0.0	1400.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	2799.9	0.0	2799.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.2	0.6
10°-20°	55.9	2.0
20°-30°	107.9	3.9
30°-40°	176.7	6.3
40°-50°	307.3	11.0
50°-60°	545.9	19.5
60°-70°	847.5	30.3
70°-80°	675.3	24.1
80°-90°	67.2	2.4
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°-90°	2799.9	100.0
0°-180°	2799.9	100.0



REPORT NUMBER: P143919

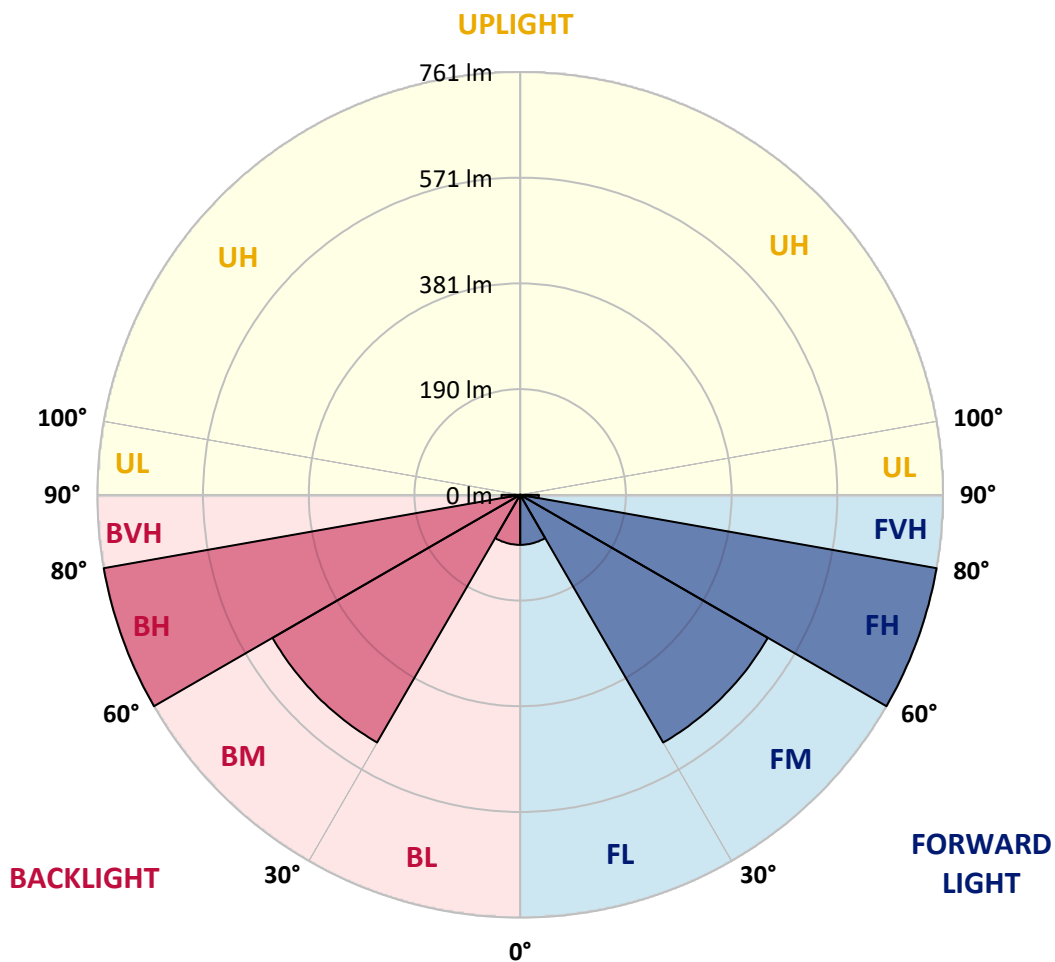
CATALOG NUMBER: LDRL-5WQ-E01-E-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	90.0	3.2			
FM (30°-60°)	515.0	18.4			
FH (60°-80°)	761.4	27.2			G1/1800
FVH (80°-90°)	33.6	1.2			G1/100
BL (0°-30°)	90.0	3.2	B0/110		
BM (30°-60°)	515.0	18.4	B1/1000		
BH (60°-80°)	761.4	27.2	B2/1000		G1/1800
BVH (80°-90°)	33.6	1.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type V Short





REPORT NUMBER: P143919

CATALOG NUMBER: LDRL-5WQ-E01-E-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	160.9	160.9	160.9	160.9	160.9	160.9	160.9	160.9	160.9	160.9	160.9
2.5°	162.2	162.2	162.2	162.0	162.0	161.8	162.0	161.8	161.8	161.8	161.8
5°	166.4	166.0	166.0	165.9	166.2	166.2	165.9	166.0	165.9	166.0	166.0
7.5°	171.7	171.7	171.7	171.5	171.9	171.7	171.5	171.7	171.7	171.5	171.5
10°	178.3	178.5	178.3	178.3	178.8	178.7	178.8	178.8	179.0	178.8	178.8
12.5°	186.0	186.0	186.1	186.3	186.5	186.7	187.2	187.1	187.4	187.1	187.1
15°	194.9	195.3	194.9	194.9	195.5	195.8	196.0	196.0	196.4	196.2	195.8
17.5°	204.4	204.6	204.4	204.2	204.8	205.3	205.5	205.5	206.1	205.7	205.7
20°	214.1	214.3	213.9	213.7	214.5	214.5	214.8	215.0	215.6	215.7	215.2
22.5°	223.0	223.2	223.0	222.9	223.6	223.6	224.1	224.3	225.0	224.9	224.9
25°	231.8	231.8	231.6	231.6	232.4	232.5	233.1	233.5	234.2	234.2	234.2
27.5°	239.8	240.0	239.7	239.5	240.9	241.5	241.9	242.6	243.1	243.5	243.3
30°	249.0	249.0	248.8	249.3	250.3	251.0	251.7	252.8	253.9	253.5	253.5
32.5°	259.8	260.1	259.9	260.7	261.8	262.9	263.8	265.1	265.6	266.5	265.8
35°	274.2	274.9	274.6	275.3	276.2	276.9	278.9	280.2	281.1	281.7	281.3
37.5°	292.3	291.9	292.6	292.8	294.6	295.6	297.9	299.8	301.2	301.8	301.4
40°	314.7	314.2	315.1	316.0	318.4	319.3	322.0	324.8	326.8	327.5	327.2
42.5°	341.6	342.3	343.8	345.1	348.4	350.9	354.0	358.0	360.2	361.1	359.9
45°	376.8	375.6	378.3	381.6	383.4	389.1	394.2	398.4	402.1	403.5	402.1
47.5°	417.0	416.9	420.1	424.2	428.9	434.2	440.2	445.7	452.1	452.5	450.6
50°	461.4	465.1	466.9	470.9	479.7	486.3	493.9	502.2	508.0	509.8	506.5
52.5°	514.9	517.7	518.8	525.5	533.6	541.6	552.4	562.3	569.0	569.7	568.1
55°	573.0	575.2	577.2	585.5	594.2	601.3	615.1	624.7	631.5	634.0	633.0
57.5°	633.1	635.1	637.7	646.7	655.6	665.6	678.6	689.9	697.8	702.5	701.3
60°	699.8	699.8	705.7	714.6	721.9	733.8	747.3	760.5	769.0	776.5	774.5
62.5°	770.0	772.0	777.6	784.9	792.6	803.6	818.9	834.6	847.8	853.4	853.3
65°	823.1	826.8	834.3	842.7	855.4	868.4	887.8	907.3	923.2	931.4	931.4
67.5°	838.6	841.0	850.3	863.1	881.6	902.2	928.5	955.7	977.5	988.2	981.5
69°	826.2	829.7	837.9	851.8	873.7	898.9	930.2	961.0	986.2	997.4	989.5
70°	811.8	815.6	823.8	837.5	860.2	887.0	918.3	951.5	978.6	988.1	979.1
72.5°	753.0	757.7	763.6	775.4	795.9	821.1	849.2	878.5	904.4	911.9	900.7
75°	652.7	653.6	656.5	665.3	672.6	690.5	714.4	737.6	757.2	761.6	749.7
77.5°	462.0	457.0	452.1	459.6	465.4	488.5	514.4	533.4	553.9	560.1	548.0
80°	202.6	200.8	207.7	217.6	243.3	258.7	284.1	311.3	328.6	348.9	327.2
82.5°	40.0	42.2	48.8	60.3	74.3	93.5	110.2	129.0	146.0	153.6	145.8
85°	16.3	17.7	20.1	22.5	24.1	27.0	31.8	39.5	43.5	44.0	41.8
87.5°	6.8	7.9	10.6	12.6	12.8	12.2	12.6	13.0	10.6	8.6	10.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P143919

CATALOG NUMBER: LDRL-5WQ-E01-E-7030

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	160.9	160.9	160.9	160.9	160.9	160.9	160.9	160.9
2.5°	161.8	162.0	161.8	162.0	161.8	161.8	162.0	161.8
5°	165.9	166.0	165.9	165.7	165.5	165.7	165.7	165.7
7.5°	171.5	171.3	171.2	171.2	171.0	170.8	171.2	171.2
10°	178.5	178.3	177.9	177.9	177.7	177.7	177.7	177.7
12.5°	186.9	186.3	186.1	185.6	185.4	185.2	185.2	185.4
15°	195.6	195.1	194.9	194.0	194.0	193.8	193.8	193.8
17.5°	205.0	204.4	203.7	203.7	203.1	202.8	202.9	202.6
20°	214.5	213.7	213.4	213.2	212.4	212.4	212.4	212.3
22.5°	223.8	223.2	222.7	221.9	221.2	221.0	221.0	220.8
25°	233.3	232.4	231.3	230.5	229.8	229.3	229.3	229.3
27.5°	242.8	241.7	240.0	239.1	238.0	237.5	237.5	237.3
30°	252.8	251.5	250.1	248.8	247.3	246.8	246.6	246.2
32.5°	264.9	263.6	262.1	260.3	258.8	257.9	257.9	257.4
35°	280.2	278.8	277.7	275.3	273.5	272.0	272.2	272.5
37.5°	300.3	298.5	297.6	294.6	292.3	290.8	290.8	290.6
40°	325.9	324.1	322.0	319.3	316.4	314.4	313.8	313.8
42.5°	358.4	356.8	354.0	350.2	346.7	344.5	342.7	342.9
45°	399.1	397.1	393.3	388.5	384.3	381.2	378.7	378.7
47.5°	448.6	444.4	439.1	434.9	427.8	423.1	421.2	420.9
50°	505.1	497.2	490.7	484.6	477.1	472.2	469.5	468.7
52.5°	564.3	556.0	547.8	540.0	530.8	525.7	521.3	521.0
55°	628.6	618.2	607.7	600.1	589.3	584.0	579.6	577.1
57.5°	694.1	682.5	675.0	664.0	652.7	648.8	644.6	641.5
60°	767.9	755.2	745.3	733.8	726.5	718.3	714.2	711.9
62.5°	843.4	831.5	818.9	807.9	797.7	792.1	786.6	783.8
65°	920.1	900.6	885.6	870.4	858.4	848.1	839.6	838.5
67.5°	967.2	942.6	917.6	895.4	877.7	863.3	854.5	851.4
69°	971.1	944.2	913.0	886.5	866.0	852.2	841.7	838.5
70°	960.5	933.4	900.6	872.1	850.9	835.7	827.1	821.6
72.5°	883.0	859.3	827.7	799.5	780.4	762.6	754.1	751.9
75°	728.5	703.3	674.2	660.7	647.4	636.2	630.4	629.8
77.5°	517.3	491.6	469.5	451.7	437.3	430.2	431.8	425.8
80°	296.1	262.5	235.8	220.1	198.7	186.0	171.5	181.9
82.5°	127.3	102.8	78.4	63.8	48.6	38.5	31.8	29.6
85°	35.6	29.0	24.3	22.3	20.1	17.9	15.2	14.1
87.5°	12.1	11.5	10.2	10.2	9.3	7.9	5.5	4.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)