

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: P233436

Luminaire Tested: **VRDN-C02-D-UNV-T1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233436  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1710-389-18)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: VRDN-CO2-D-UNV-T1  
Description: VERDEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 1140mA LEDS AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11585.9 lumens  
Efficiency: N/A  
Efficacy: 128.7 lumens/watt  
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')  
IES Classification: Type I - Short - Full Cutoff  
BUG Rating: B3 - U0 - G3

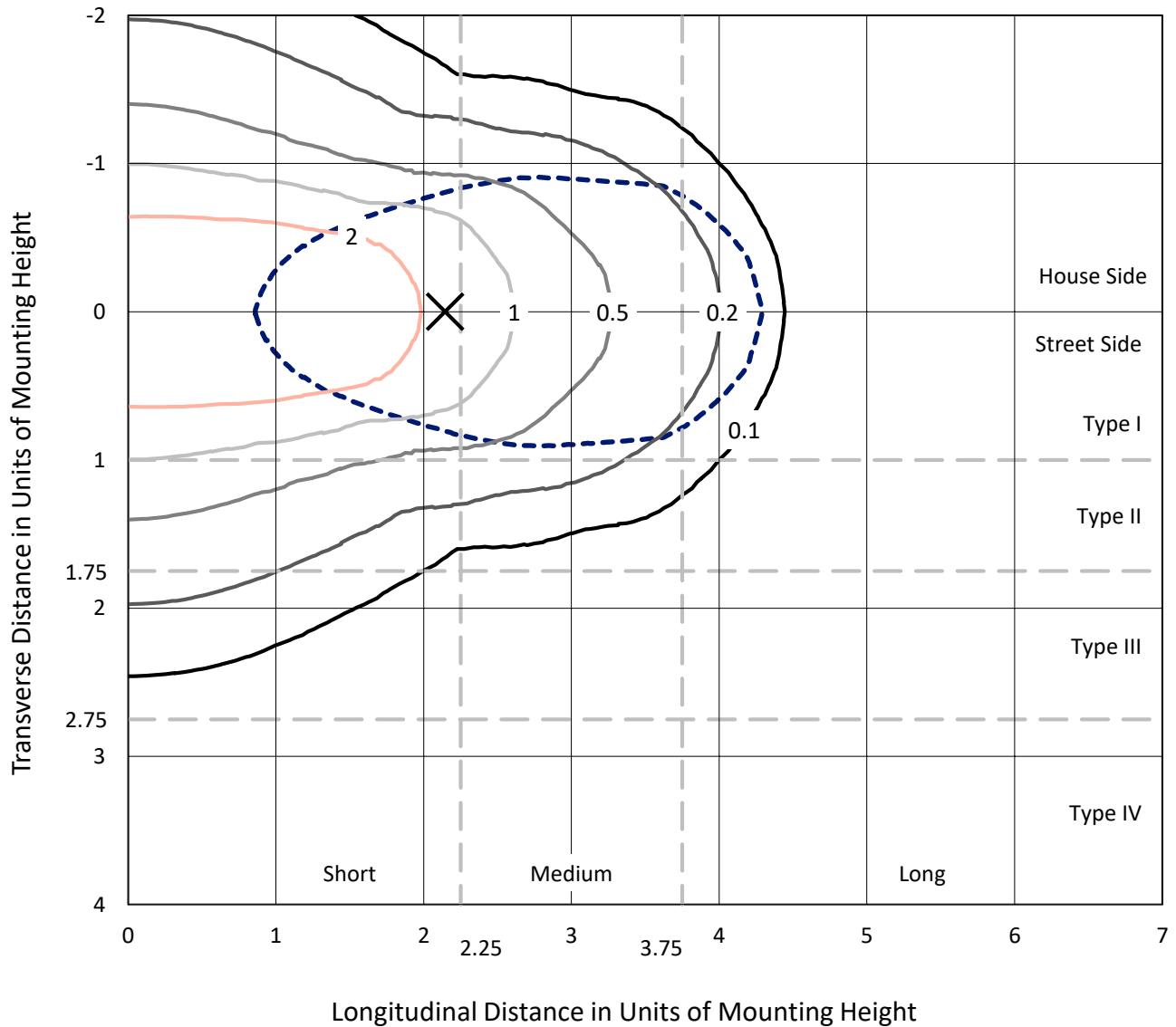
Input Watts (W): 90  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

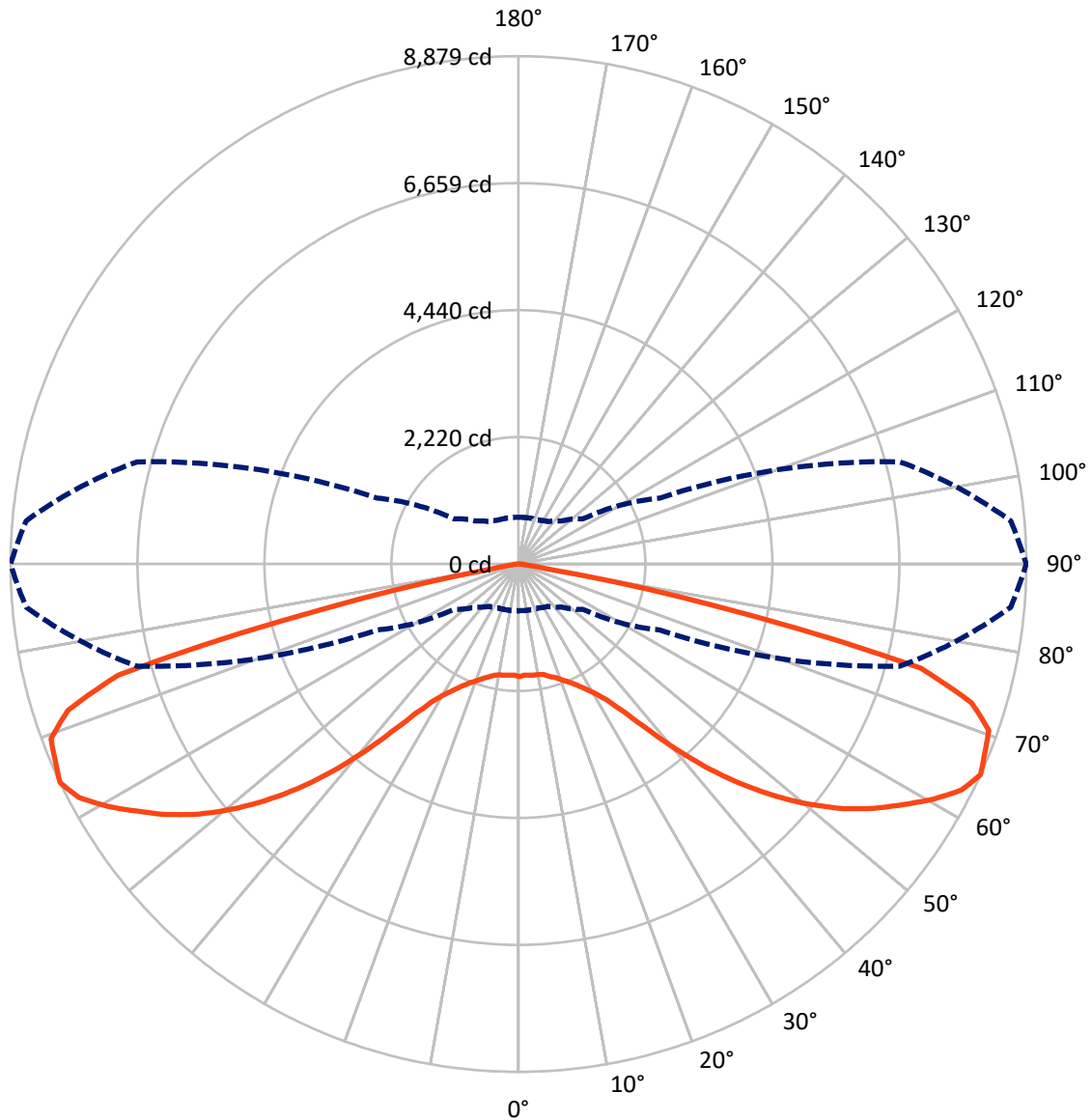
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.9 fc  
 Type I - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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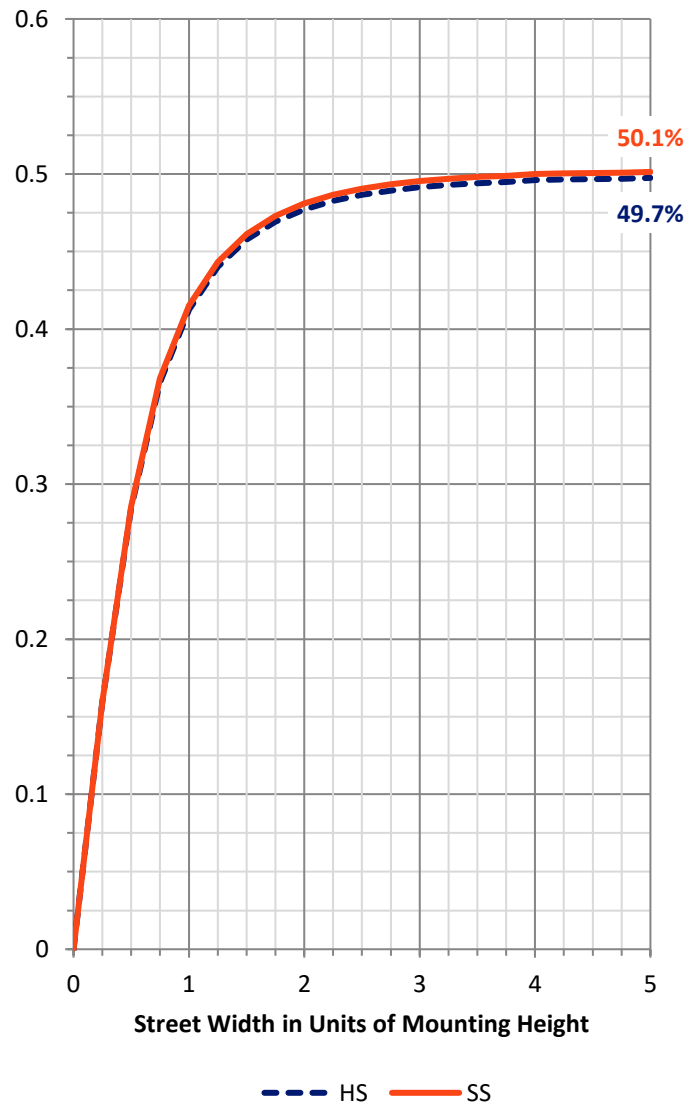
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5793.0	0.0	5793.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	5793.0	0.0	5793.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	11585.9	0.0	11585.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.8	1.6
10°-20°	551.7	4.8
20°-30°	904.7	7.8
30°-40°	1308.1	11.3
40°-50°	1915.5	16.5
50°-60°	2484.9	21.4
60°-70°	2627.9	22.7
70°-80°	1542.7	13.3
80°-90°	63.5	0.5
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°	11585.9	100.0
0°-180°	11585.9	100.0



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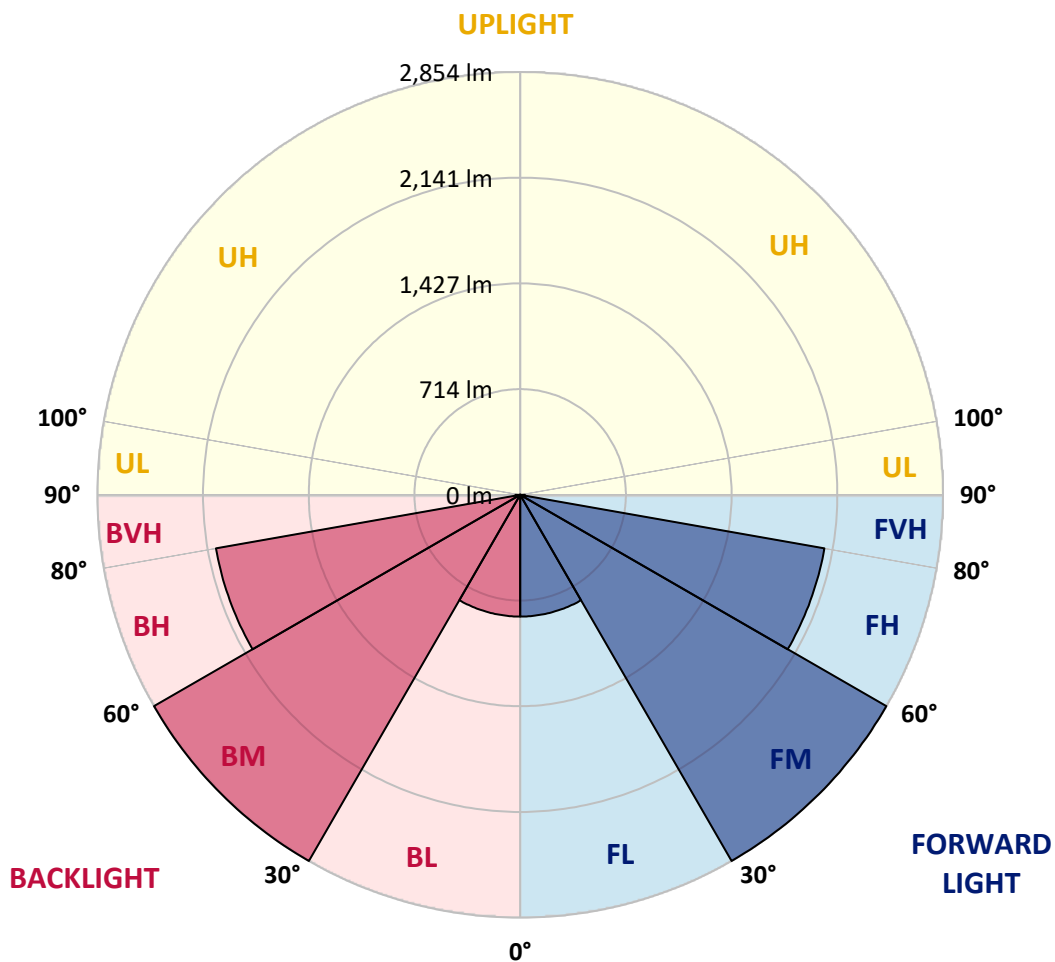
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	821.6	7.1			
FM	(30°-60°)	2854.3	24.6			
FH	(60°-80°)	2085.3	18.0			G2/5000
FVH	(80°-90°)	31.8	0.3			G1/100
BL	(0°-30°)	821.6	7.1	B2/1000		
BM	(30°-60°)	2854.3	24.6	B3/5000		
BH	(60°-80°)	2085.3	18.0	B3/2500		G3/2500
BVH	(80°-90°)	31.8	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type I Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1972	1972	1972	1972	1972	1972	1972	1972	1972	1972	1972
2.5°	1991	1989	1978	1962	1957	1961	1960	1955	1955	1957	1944
5°	1979	1976	1963	1959	1960	1965	1964	1960	1962	1960	1950
7.5°	1958	1955	1947	1945	1943	1951	1959	1964	1970	1967	1960
10°	1938	1932	1933	1923	1927	1942	1950	1959	1968	1967	1965
12.5°	1908	1902	1905	1902	1916	1934	1958	1975	1985	1982	1985
15°	1871	1869	1874	1878	1903	1944	1970	2007	2029	2030	2037
17.5°	1829	1825	1834	1849	1895	1940	2005	2046	2078	2083	2089
20°	1758	1760	1774	1800	1865	1946	2026	2088	2134	2146	2159
22.5°	1669	1674	1700	1754	1838	1939	2049	2137	2203	2230	2238
25°	1576	1584	1626	1698	1807	1936	2078	2194	2288	2331	2336
27.5°	1493	1500	1554	1646	1778	1937	2104	2263	2390	2453	2463
30°	1409	1417	1473	1587	1749	1935	2134	2341	2512	2602	2617
32.5°	1337	1345	1403	1522	1713	1932	2170	2436	2659	2805	2825
35°	1276	1285	1344	1461	1667	1933	2222	2566	2887	3128	3167
37.5°	1225	1234	1286	1404	1620	1925	2285	2730	3189	3588	3660
40°	1193	1201	1240	1345	1563	1907	2358	2912	3558	4140	4266
42.5°	1160	1169	1201	1291	1502	1880	2422	3095	3943	4719	4899
45°	1124	1130	1165	1246	1442	1838	2478	3270	4347	5307	5502
47.5°	1094	1097	1126	1201	1379	1776	2493	3420	4755	5879	6070
50°	1074	1069	1096	1161	1320	1690	2467	3532	5194	6425	6606
52.5°	1043	1042	1063	1122	1264	1591	2374	3586	5633	6936	7104
55°	1014	1014	1031	1077	1205	1489	2215	3564	6054	7420	7543
57.5°	972	971	985	1027	1136	1393	2014	3462	6396	7868	7935
60°	931	930	938	970	1070	1290	1799	3262	6735	8264	8344
62.5°	879	878	886	914	996	1180	1588	3018	6934	8492	8699
65°	817	818	828	846	904	1062	1379	2727	6901	8640	8879
67.5°	758	755	763	766	809	938	1184	2496	6649	8666	8796
70°	685	681	681	669	699	793	1001	2254	5933	8429	8725
72.5°	573	573	567	554	573	643	834	1984	4807	7915	8282
75°	357	360	373	413	441	485	661	1672	3927	6585	7262
77.5°	183	187	192	193	200	209	315	936	1996	3281	3500
80°	46	47	113	126	135	139	116	312	517	484	473
82.5°	31	33	65	80	74	56	64	95	77	105	118
85°	17	17	29	31	32	36	32	31	35	67	78
87.5°	8	8	12	15	15	18	15	16	16	31	36
90°	0	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)