

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: P23088

Luminaire Tested: **XTOR9A-N**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P23088
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: XTOR9A-N
Description: LUMARK CROSSTOUR MAXX LED 85W - 3500K, FULL CUTOFF
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5456.5 lumens
Efficiency: N/A
Efficacy: 65.1 lumens/watt
Luminous Opening: Rectangular (W 0.69' x L: 0.36' x H: 0')
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

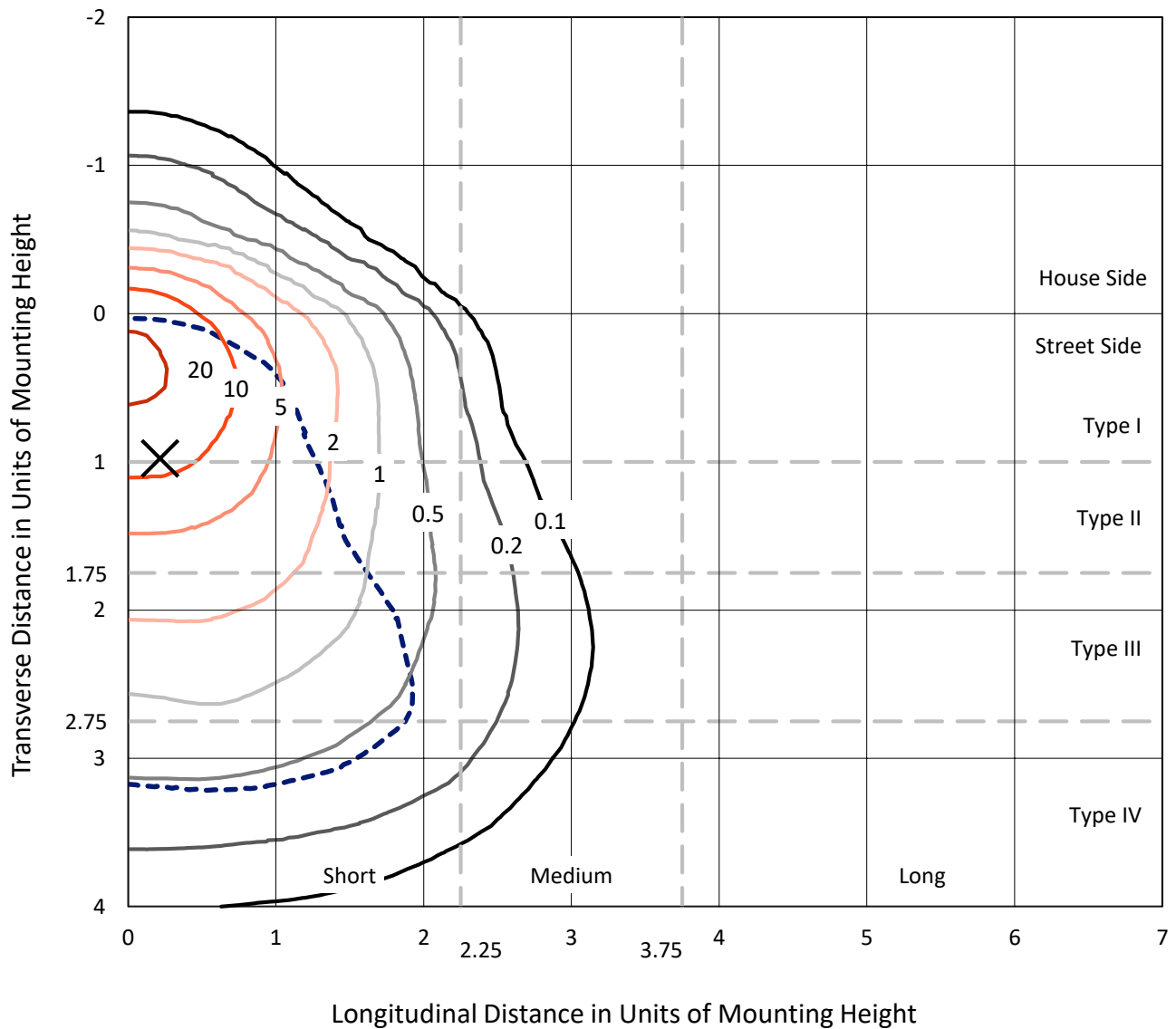
Input Watts (W): 83.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

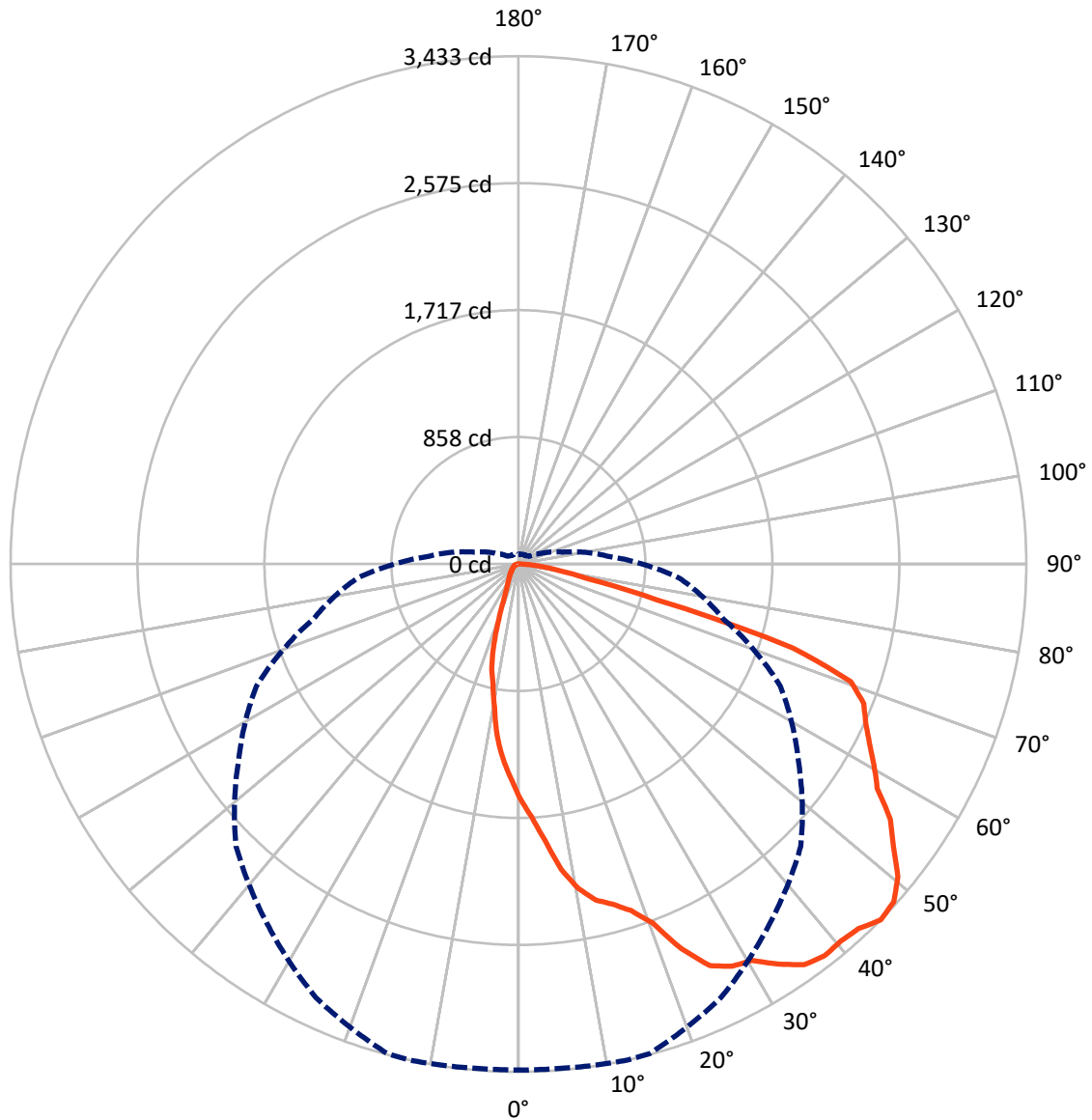
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 22.1 fc
 Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 12.5-Deg Lateral - - - Horizontal Cone Through 45-Deg Vertical

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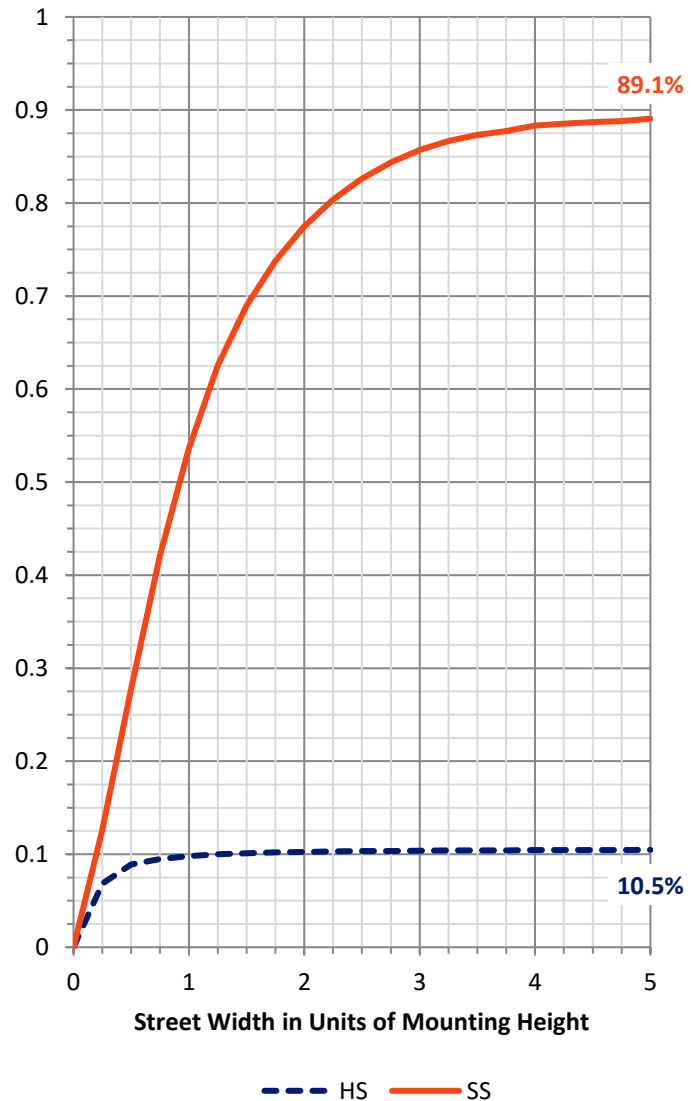
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	579.5	0.0	579.5
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	4877.0	0.0	4877.0
	% Fixture	89.4	0.0	89.4
Total	Lumens	5456.5	0.0	5456.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.4	2.8
10°-20°	438.5	8.0
20°-30°	684.0	12.5
30°-40°	899.1	16.5
40°-50°	1028.7	18.9
50°-60°	991.3	18.2
60°-70°	806.6	14.8
70°-80°	408.9	7.5
80°-90°	47.0	0.9
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°	5456.5	100.0
0°-180°	5456.5	100.0

Coefficient of Utilization



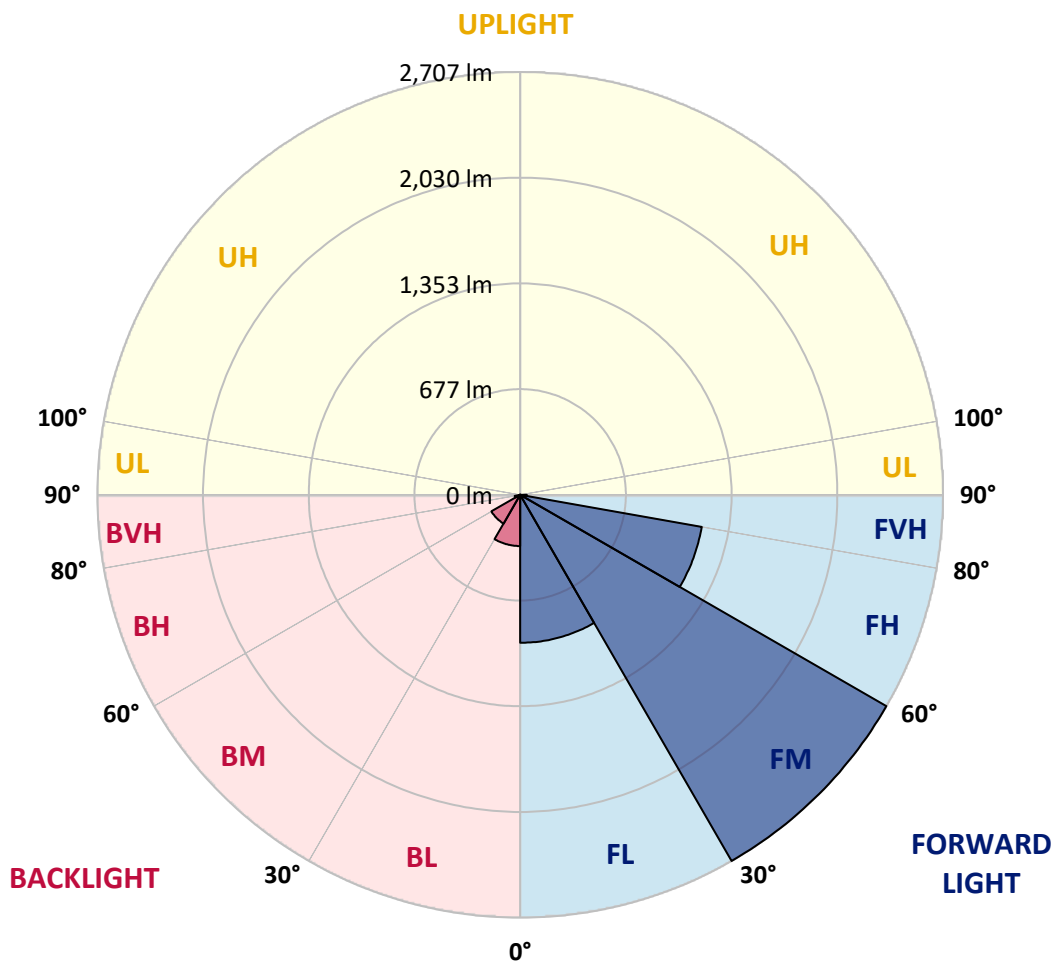
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	947.1	17.4			
FM	(30°-60°)	2706.9	49.6			
FH	(60°-80°)	1180.4	21.6			G1/1800
FVH	(80°-90°)	42.6	0.8			G1/100
BL	(0°-30°)	327.8	6.0	B1/500		
BM	(30°-60°)	212.1	3.9	B0/220		
BH	(60°-80°)	35.2	0.6	B0/110		G0/110
BVH	(80°-90°)	4.4	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	12.5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1589	1589	1589	1589	1589	1589	1589	1589	1589	1589	1589
2.5°	1733	1722	1711	1711	1713	1697	1689	1669	1647	1627	1603
5°	1882	1884	1875	1873	1859	1829	1805	1759	1714	1667	1616
7.5°	2099	2092	2086	2081	2051	1994	1919	1844	1775	1697	1620
10°	2239	2234	2231	2227	2192	2134	2067	1939	1826	1719	1612
12.5°	2333	2331	2331	2327	2295	2251	2176	2057	1889	1744	1606
15°	2393	2388	2386	2384	2364	2334	2263	2148	1987	1771	1600
17.5°	2485	2477	2462	2458	2411	2371	2315	2207	2043	1792	1583
20°	2643	2625	2591	2577	2512	2424	2333	2236	2080	1813	1557
22.5°	2873	2872	2826	2801	2675	2528	2370	2248	2094	1840	1526
25°	3045	3040	3008	2992	2875	2701	2458	2256	2094	1843	1493
27.5°	3093	3085	3079	3075	3005	2834	2578	2295	2088	1835	1455
30°	3151	3148	3109	3095	3034	2908	2701	2358	2061	1808	1407
32.5°	3280	3272	3224	3201	3078	2925	2756	2441	2044	1764	1359
35°	3360	3357	3327	3314	3163	2965	2750	2501	2042	1707	1311
37.5°	3388	3380	3361	3359	3244	3018	2718	2505	2044	1642	1263
40°	3364	3360	3354	3352	3261	3041	2732	2443	2044	1570	1217
42.5°	3376	3374	3370	3360	3234	3017	2734	2371	2025	1495	1161
45°	3420	3421	3433	3426	3236	2964	2699	2309	1954	1433	1092
47.5°	3336	3345	3413	3432	3286	2944	2607	2229	1824	1384	1016
50°	3205	3214	3324	3342	3239	2953	2529	2108	1671	1324	926
52.5°	3082	3100	3174	3183	3141	2902	2463	1930	1544	1250	826
55°	2928	2952	3050	3067	3011	2828	2333	1741	1404	1132	720
57.5°	2749	2790	2860	2882	2891	2705	2178	1582	1247	980	617
60°	2631	2676	2761	2774	2754	2562	2016	1410	1078	804	511
62.5°	2501	2545	2662	2724	2742	2416	1804	1300	893	616	404
65°	2351	2380	2579	2624	2607	2374	1613	1164	696	447	297
67.5°	2121	2183	2517	2573	2514	2228	1559	987	568	302	195
70°	2035	2123	2384	2395	2258	2048	1539	867	406	175	100
72.5°	1751	1793	1938	1985	2040	1860	1274	750	330	129	58
75°	890	902	970	1025	1250	1372	1031	644	282	88	30
77.5°	453	455	479	488	529	579	571	518	252	64	21
80°	298	297	309	309	341	334	221	212	178	40	15
82.5°	186	184	183	184	204	195	130	94	65	20	11
85°	100	98	95	97	107	105	66	44	22	10	9
87.5°	34	35	33	32	36	36	24	16	9	7	8
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1589	1589	1589	1589	1589	1589	1589	1589	1589	1589	1589
2.5°	1591	1577	1552	1521	1501	1487	1470	1455	1450	1447	1442
5°	1591	1563	1511	1461	1422	1388	1358	1336	1323	1317	1313
7.5°	1581	1538	1466	1392	1336	1289	1245	1204	1176	1165	1175
10°	1561	1505	1410	1317	1244	1169	1101	1034	986	971	957
12.5°	1541	1472	1354	1247	1142	1032	935	867	831	824	827
15°	1518	1435	1296	1169	1025	883	812	761	723	710	714
17.5°	1486	1389	1231	1075	893	774	713	634	572	547	553
20°	1445	1334	1158	967	775	681	586	484	402	382	379
22.5°	1397	1272	1079	853	683	569	438	337	274	258	257
25°	1347	1208	996	736	597	448	312	234	202	195	194
27.5°	1292	1139	906	644	502	332	225	183	167	161	161
30°	1229	1063	811	558	403	242	174	152	142	138	138
32.5°	1163	987	716	484	310	182	144	131	123	121	120
35°	1096	909	622	411	234	145	123	114	109	107	107
37.5°	1029	831	533	341	177	120	107	101	97	95	95
40°	964	755	449	276	138	103	94	90	87	85	85
42.5°	900	682	374	217	111	90	83	80	77	75	75
45°	836	604	309	170	93	78	74	71	68	67	66
47.5°	774	531	251	135	81	70	66	63	61	60	60
50°	712	463	203	106	71	62	59	57	55	54	54
52.5°	644	395	162	87	62	56	53	51	50	50	50
55°	572	328	129	72	56	50	48	47	47	47	46
57.5°	490	266	101	62	49	45	44	44	43	42	42
60°	395	204	79	54	44	41	41	41	39	38	38
62.5°	298	145	62	47	39	38	38	37	36	36	35
65°	204	100	49	41	35	35	34	34	33	32	32
67.5°	126	67	40	36	32	32	31	31	30	29	29
70°	71	43	33	31	29	28	28	28	27	26	26
72.5°	40	31	27	26	25	25	25	24	23	22	22
75°	25	25	22	22	22	22	21	20	19	18	18
77.5°	20	20	18	18	19	18	17	17	16	15	15
80°	15	16	14	15	15	14	14	13	12	12	12
82.5°	11	11	11	11	11	11	10	10	9	9	9
85°	9	9	9	9	9	8	7	7	7	7	7
87.5°	8	8	8	8	7	7	6	6	6	5	5
90°	0	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)