

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: INVUE

Report Number: P596120

Luminaire Tested: **MSA-SA4A-AMB-U-T4FT**

Issue Date: 4/29/2022

Test Information

Test Method: LM-79-08
Report Number: P596120
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2109-400-13)
Test Lab: INNOVATIONS CENTER
Issue Date: 4/29/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA4A-AMB-U-T4FT
Description: POST TOP DECORATIVE LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH
AND TYPE IV FORWARD THROW OPTICS.
Light Source: (64) 1549K CCT, -21.5 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3018 lumens
Efficiency: N/A
Efficacy: 38.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

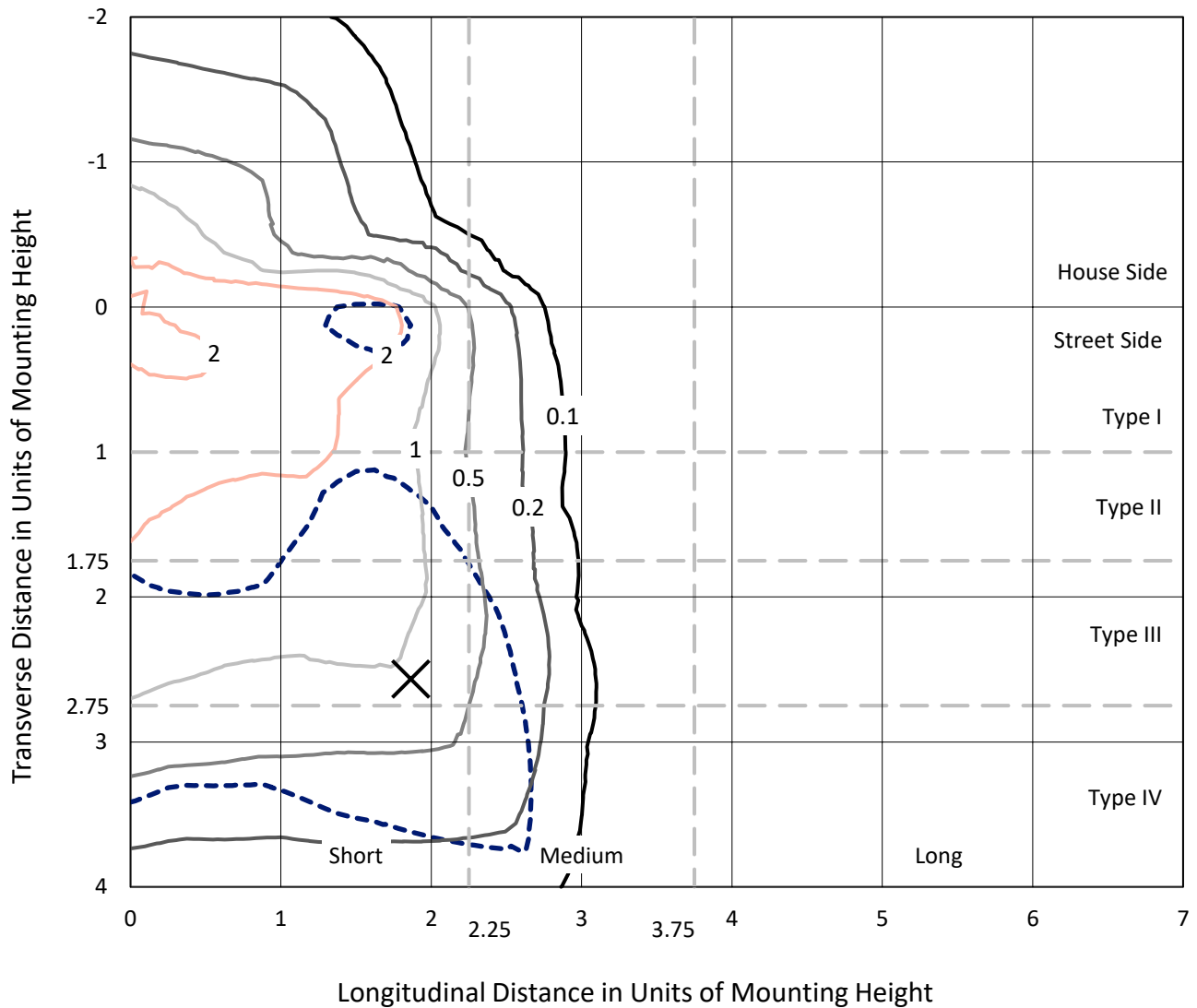
Input Watts (W): 79
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P596120
 CATALOG NUMBER: MSA-SA4A-AMB-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

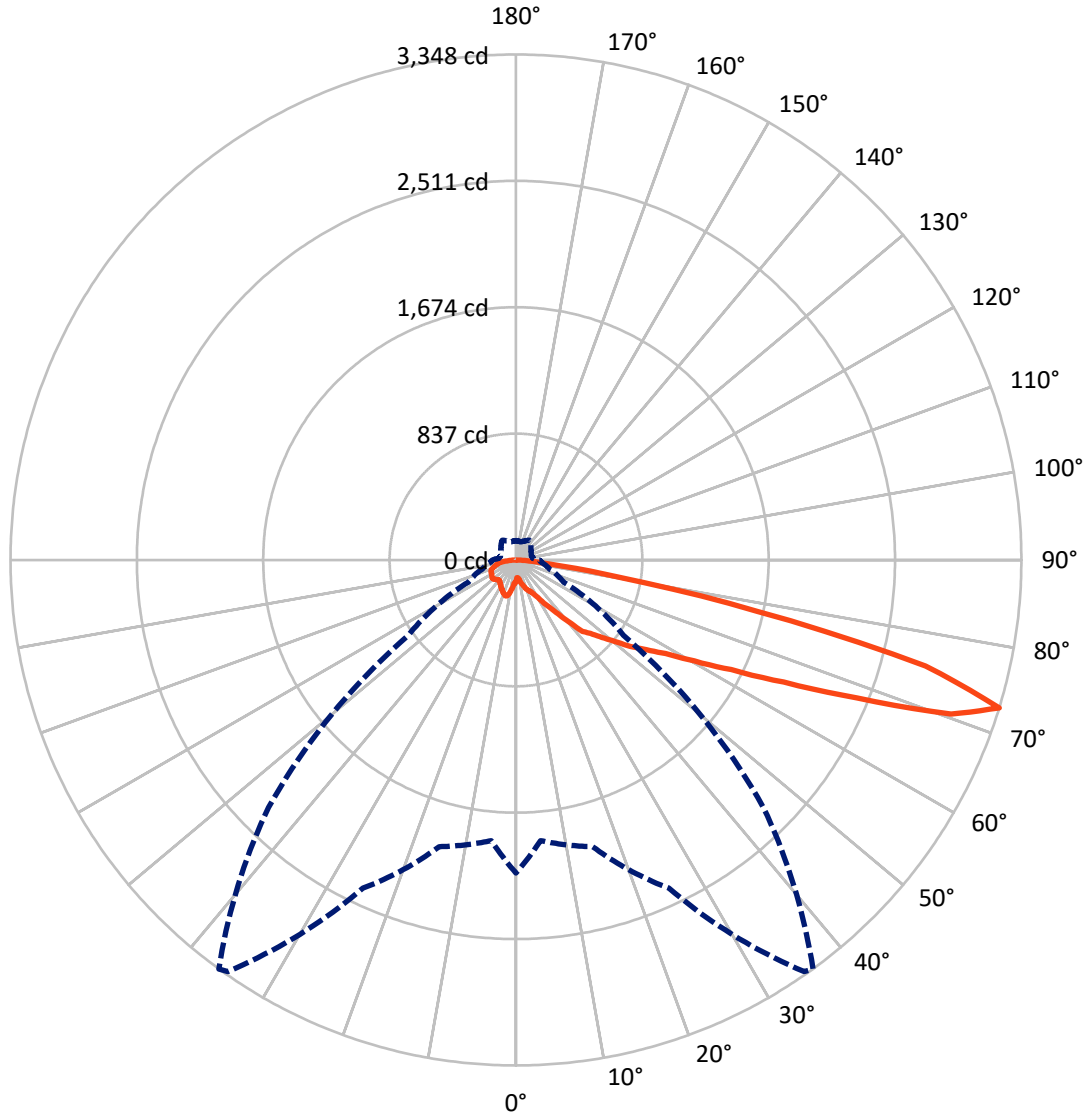
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.8 fc
 Type IV - Short - N/A

REPORT NUMBER: P596120
CATALOG NUMBER: MSA-SA4A-AMB-U-T4FT

Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P596120

CATALOG NUMBER: MSA-SA4A-AMB-U-T4FT

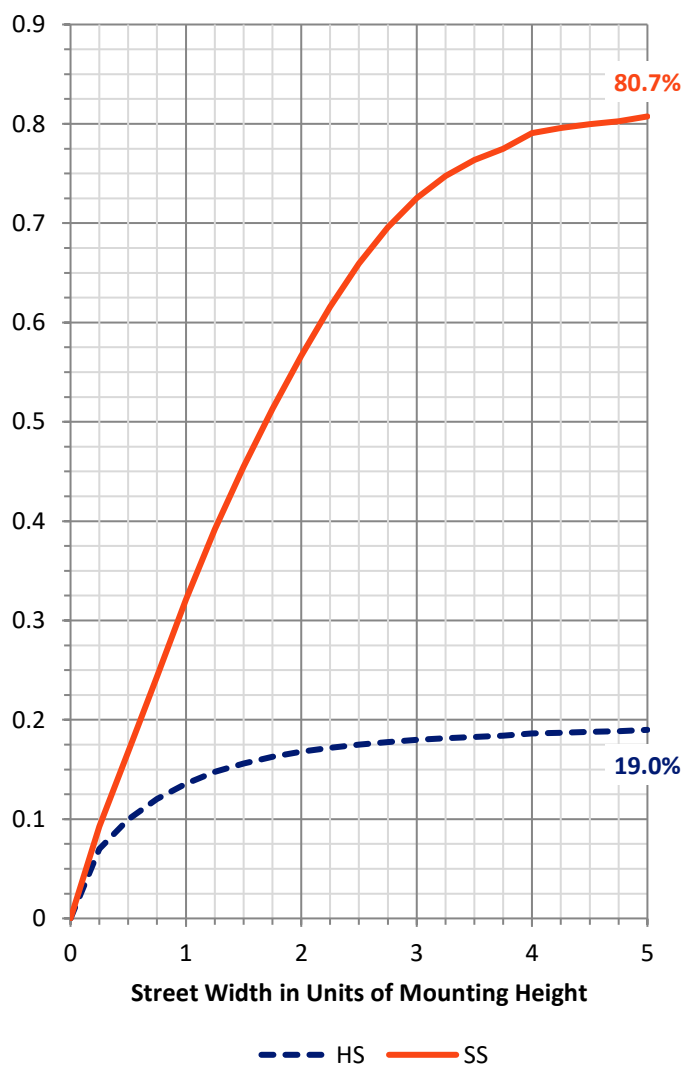
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	581.4	0.0	581.4
	% Fixture	19.3	0.0	19.3
Street Side	Lumens	2436.5	0.0	2436.5
	% Fixture	80.7	0.0	80.7
Total	Lumens	3018.0	0.0	3018.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.6	0.5
10°-20°	65.1	2.2
20°-30°	127.0	4.2
30°-40°	223.6	7.4
40°-50°	396.7	13.1
50°-60°	659.7	21.9
60°-70°	882.9	29.3
70°-80°	591.7	19.6
80°-90°	54.7	1.8
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°	3018.0	100.0
0°-180°	3018.0	100.0

Coefficient of Utilization



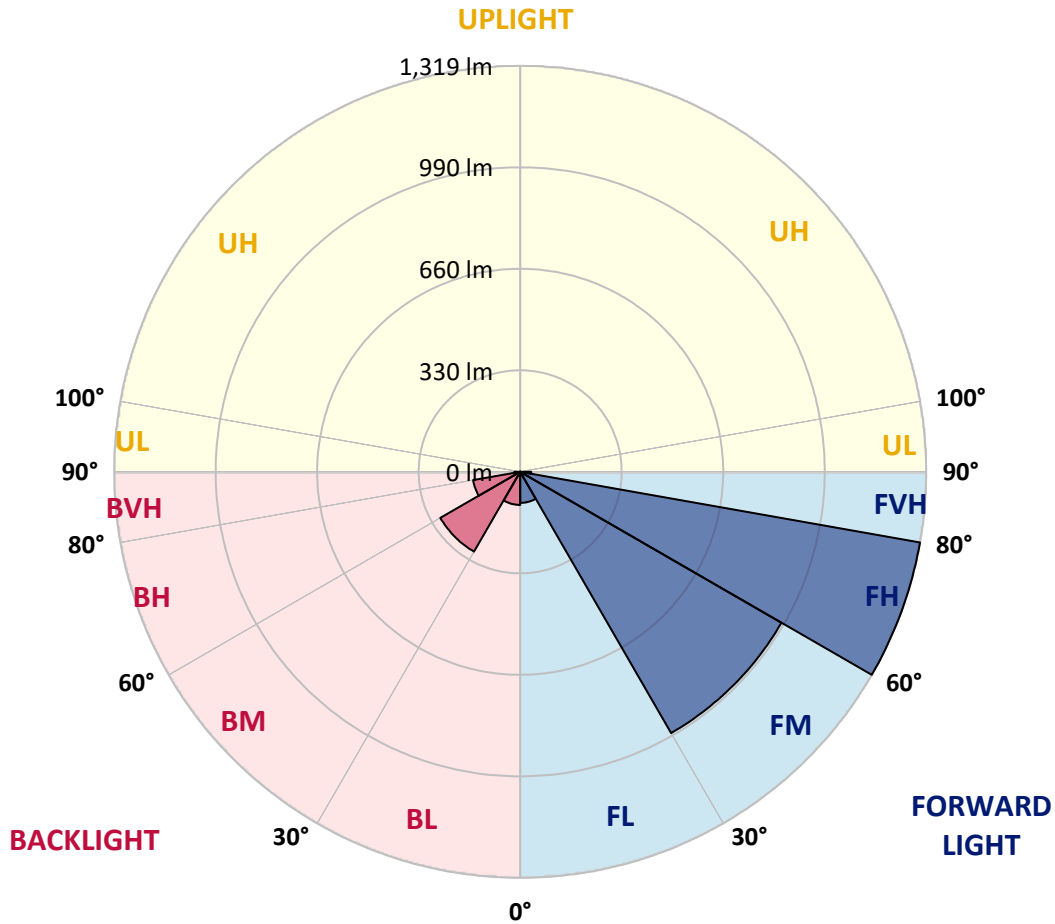
REPORT NUMBER: P596120
 CATALOG NUMBER: MSA-SA4A-AMB-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	101.0	3.3			
FM (30°-60°)	980.5	32.5			
FH (60°-80°)	1319.4	43.7			G1/1800
FVH (80°-90°)	35.7	1.2			G1/100
BL (0°-30°)	107.6	3.6	B0/110		
BM (30°-60°)	299.4	9.9	B1/1000		
BH (60°-80°)	155.3	5.1	B1/500		G1/500
BVH (80°-90°)	19.0	0.6			G1/100
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





REPORT NUMBER: P596120
 CATALOG NUMBER: MSA-SA4A-AMB-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	142	142	142	142	142	142	142	142	142	142	142
2.5°	156	143	137	121	121	118	125	130	135	150	163
5°	160	148	146	136	118	117	115	127	149	182	198
7.5°	156	149	149	137	124	123	128	145	168	195	217
10°	147	145	139	132	139	138	150	157	174	201	224
12.5°	147	146	148	146	157	160	170	182	198	220	245
15°	168	167	162	165	172	173	187	200	216	242	262
17.5°	194	195	184	186	191	192	203	213	228	260	301
20°	227	226	207	199	209	209	217	223	233	273	329
22.5°	265	258	229	218	220	222	224	233	238	279	361
25°	301	297	261	243	237	234	241	246	259	296	376
27.5°	346	349	295	281	262	260	253	265	280	304	409
30°	415	404	345	323	298	292	277	295	304	324	457
32.5°	486	476	401	371	342	341	326	318	336	363	509
35°	556	548	484	432	385	386	372	377	379	398	562
37.5°	666	653	570	498	465	453	449	445	431	446	676
40°	756	719	638	588	544	535	542	503	485	514	806
42.5°	827	795	711	681	639	646	606	561	563	594	938
45°	896	834	733	718	697	693	698	672	669	694	1058
47.5°	953	888	797	772	751	767	814	780	782	814	1234
50°	1023	948	860	828	848	846	958	910	887	937	1434
52.5°	1103	1009	922	913	944	951	1051	1054	996	1082	1687
55°	1196	1085	1013	992	1057	1049	1175	1242	1144	1231	1889
57.5°	1316	1194	1146	1114	1160	1169	1342	1409	1232	1356	2008
60°	1504	1356	1288	1246	1337	1359	1533	1530	1292	1403	1942
62.5°	1741	1595	1469	1434	1600	1600	1782	1636	1290	1313	1594
65°	2063	1883	1735	1671	1925	1950	2117	1700	1179	1048	1041
67.5°	2328	2137	1992	2034	2447	2438	2471	1687	958	732	579
70°	2395	2211	2114	2347	3073	3057	2625	1364	643	416	281
72.5°	2074	1866	1966	2399	3328	3348	2318	870	347	231	168
75°	1154	1030	1248	1897	2813	2803	1492	431	194	154	129
77.5°	431	377	501	973	1719	1632	639	191	132	120	105
80°	128	117	168	370	684	677	205	112	102	95	79
82.5°	59	55	80	141	244	219	93	76	78	65	49
85°	27	26	42	64	97	87	43	39	45	38	26
87.5°	4	6	10	14	14	17	9	11	12	11	7
90°	0	0	0	0	0	0	0	0	0	0	0



REPORT NUMBER: P596120
 CATALOG NUMBER: MSA-SA4A-AMB-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	142	142	142	142	142	142	142	142	142	142	142
2.5°	171	154	163	150	144	155	154	153	163	160	171
5°	211	197	193	177	158	148	156	181	204	211	228
7.5°	238	225	229	202	171	161	185	202	222	233	249
10°	238	238	236	215	219	219	207	205	222	221	228
12.5°	259	260	261	254	257	250	234	227	223	225	227
15°	278	283	294	281	276	261	244	227	230	227	222
17.5°	314	329	316	304	285	272	244	228	227	229	220
20°	343	355	333	306	282	256	234	221	225	236	240
22.5°	381	390	339	295	256	237	230	222	230	244	244
25°	405	415	348	291	241	214	218	222	228	252	250
27.5°	446	429	340	278	220	200	214	222	224	250	256
30°	473	482	339	254	204	191	202	213	222	252	251
32.5°	540	500	348	229	189	186	193	205	216	240	247
35°	597	560	332	207	182	178	187	194	204	237	239
37.5°	715	604	315	195	177	176	177	188	199	225	234
40°	832	659	287	185	173	175	174	183	189	212	221
42.5°	941	713	256	174	172	174	177	181	187	200	208
45°	1050	723	225	163	167	186	182	183	184	186	193
47.5°	1174	753	203	153	168	200	186	181	178	176	182
50°	1332	820	179	149	172	202	193	179	171	169	177
52.5°	1542	885	165	145	171	201	197	177	165	162	170
55°	1713	906	157	144	165	198	196	173	159	159	165
57.5°	1806	872	152	141	159	192	190	166	157	158	165
60°	1742	747	144	138	154	184	186	163	154	157	164
62.5°	1392	542	136	133	147	177	185	160	151	154	162
65°	896	345	128	128	141	171	184	156	146	153	160
67.5°	490	217	122	125	137	162	180	154	140	151	156
70°	253	145	115	119	130	153	173	148	133	142	143
72.5°	155	115	105	112	120	139	159	139	124	127	128
75°	118	96	92	101	107	124	145	129	115	113	115
77.5°	94	77	79	88	91	110	131	119	103	100	101
80°	69	60	64	73	74	97	118	102	85	80	81
82.5°	43	38	46	52	52	72	96	74	61	50	50
85°	20	20	26	28	27	34	54	43	33	26	26
87.5°	3	6	7	7	6	2	5	6	6	5	2
90°	0	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)