

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: HALO

Report Number: G3-2109-403-1

Luminaire Tested: **STW8A2PD-B2**

Test Date: 9/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: G3-2109-403-1  
Test Lab: COOPER LIGHTING SOLUTIONS  
Test Date: 9/28/2021  
Issue Date: 9/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: STW8A2PD-B2  
Description: 17 LED 5 IN PARALLEL  
Light Source: 85 SEOL SEMICONDUCTOR  
STW8A2PD-B2. SEOL SEMICONDUCTOR  
Ballast/Driver: DALITE  
DRP30W450NUD-03 B10C4

**Summary**

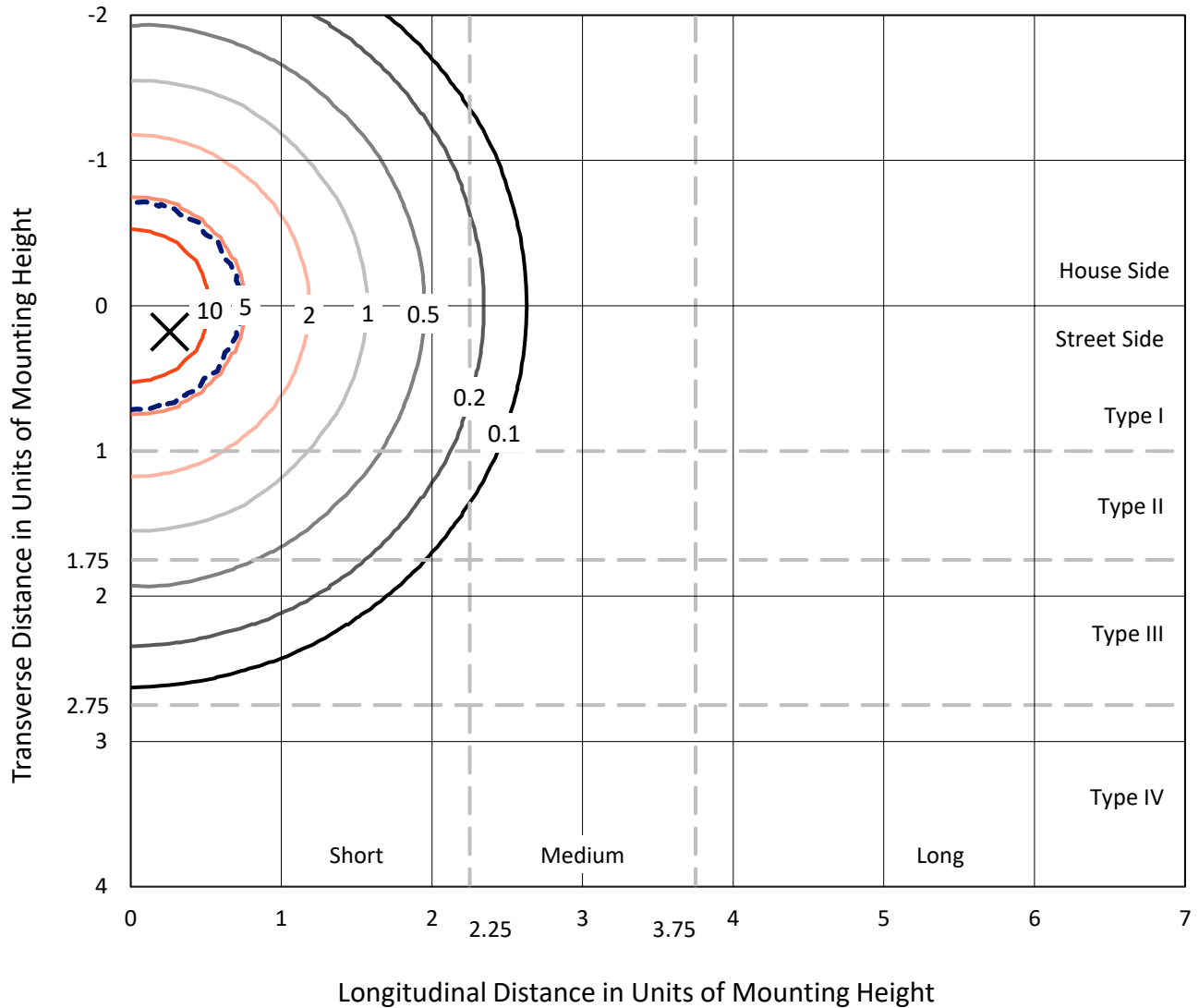
Lumens per Lamp: N/A  
Luminaire Lumens: 4081.9 lumens  
Efficiency: N/A  
Efficacy: 146.8 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 0.58' x H: 0.38')  
IES Classification: Type V - Short  
BUG Rating: B2 - U3 - G1

Input Watts (W): 27.8  
Input Voltage (V): 12008.0  
Input Current (Ain): 0.235  
Voltage Rise (V): NR  
Power Factor: 0.986  
Total Harmonic Distortion (THDi): 14.0%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 3 HR  
Ambient Temperature (°C): 24.2  
Test Distance: 24 FT

REPORT NUMBER: G3-2109-403-1  
 CATALOG NUMBER: STW8A2PD-B2

### Iso-Footcandle Lines of Horizontal Illumination

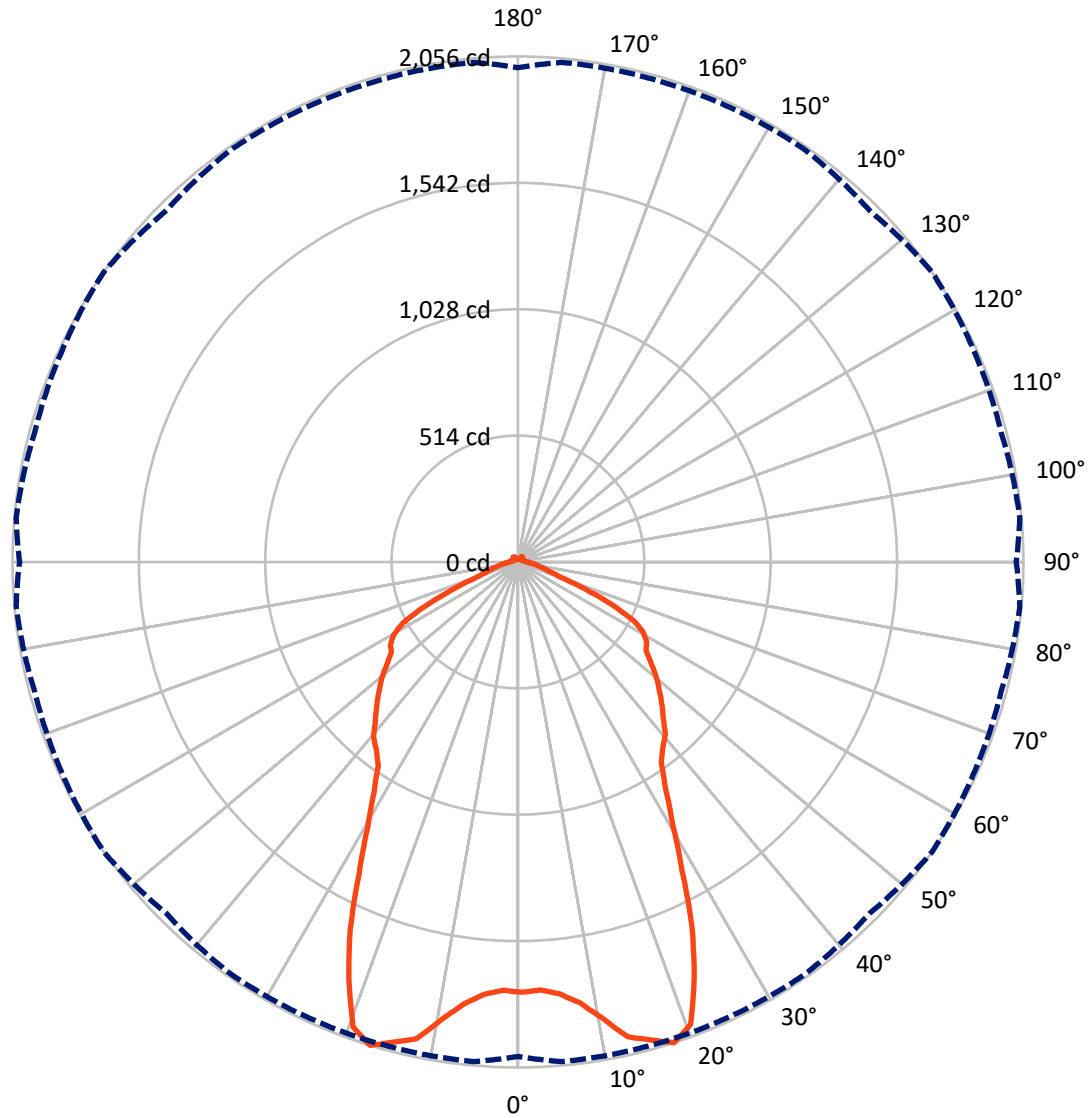
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 18.2 fc  
 Type V - Short - N/A

REPORT NUMBER: G3-2109-403-1  
CATALOG NUMBER: STW8A2PD-B2

### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral    - - - Horizontal Cone Through 17.5-Deg Vertical

REPORT NUMBER: G3-2109-403-1  
 CATALOG NUMBER: STW8A2PD-B2

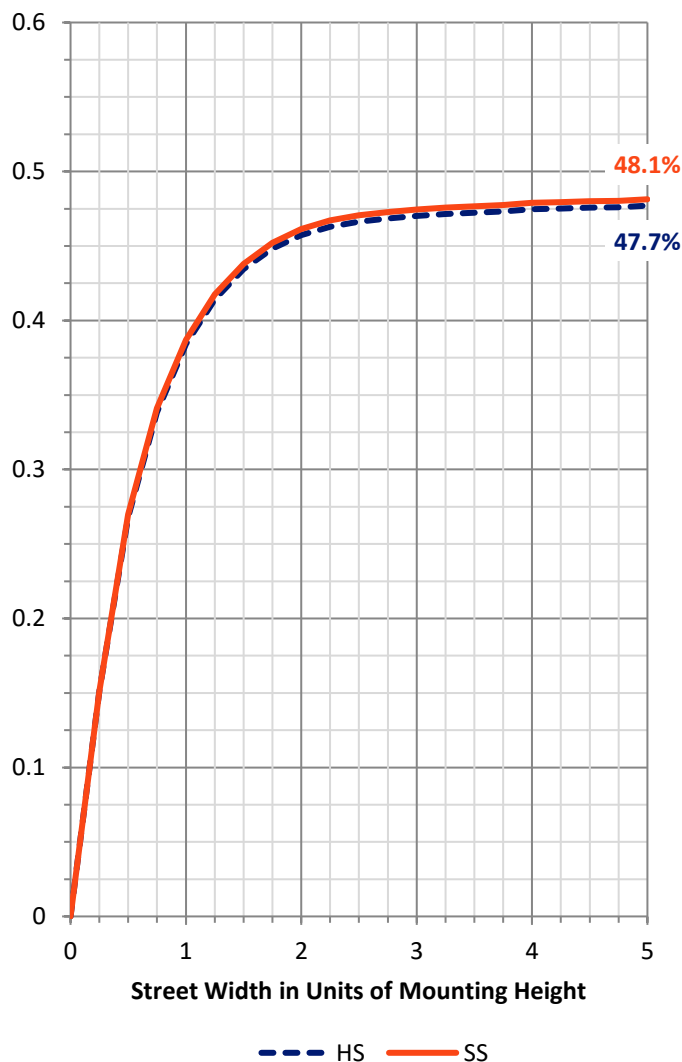
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1973.4	67.5	2040.9
	% Fixture	48.3	1.7	50.0
<b>Street Side</b>	Lumens	1973.4	67.5	2040.9
	% Fixture	48.3	1.7	50.0
<b>Total</b>	Lumens	3946.8	135.1	4081.9
	% Fixture	96.7	3.3	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	171.7	4.2
10°-20°	566.1	13.9
20°-30°	747.3	18.3
30°-40°	651.1	16.0
40°-50°	638.2	15.6
50°-60°	584.3	14.3
60°-70°	404.2	9.9
70°-80°	125.2	3.1
80°-90°	58.6	1.4
90°-100°	31.3	0.8
100°-110°	23.0	0.6
110°-120°	20.6	0.5
120°-130°	20.1	0.5
130°-140°	19.3	0.5
140°-150°	14.3	0.4
150°-160°	5.8	0.1
160°-170°	0.7	0.0
170°-180°	0.0	0.0
0°-90°	3946.8	96.7
0°-180°	4081.9	100.0

**Coefficient of Utilization**



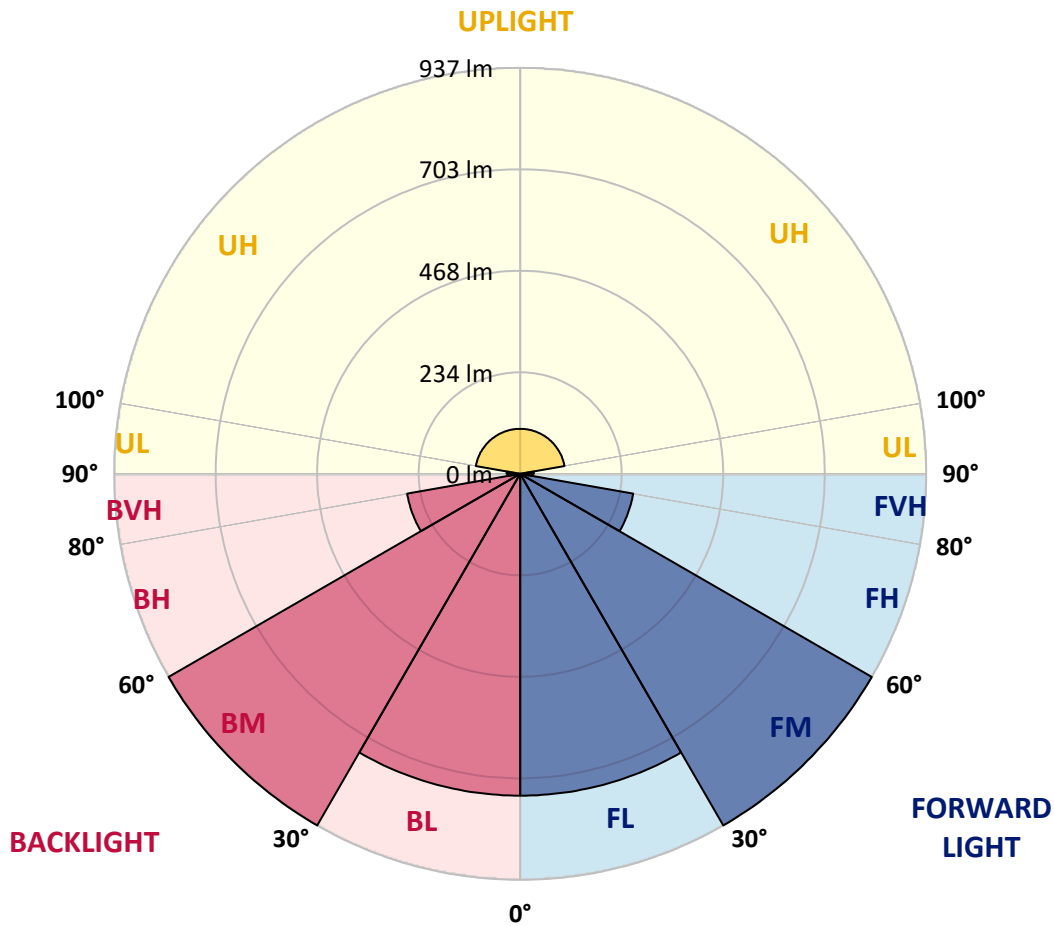
REPORT NUMBER: G3-2109-403-1  
 CATALOG NUMBER: STW8A2PD-B2

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	742.6	18.2			
FM (30°-60°)	936.8	22.9			
FH (60°-80°)	264.7	6.5			G0/660
FVH (80°-90°)	29.3	0.7			G1/100
BL (0°-30°)	742.6	18.2	B2/1000		
BM (30°-60°)	936.8	22.9	B1/1000		
BH (60°-80°)	264.7	6.5	B1/500		G0/660
BVH (80°-90°)	29.3	0.7			G1/100
UL (90°-100°)	31.3	0.8		U2/50	
UH (100°-180°)	103.7	2.5		U3/500	

**BUG Rating: B2-U3-G1**

Type V Short





REPORT NUMBER: G3-2109-403-1  
 CATALOG NUMBER: STW8A2PD-B2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
2.5°	1719	1744	1745	1748	1755	1755	1743	1744	1739	1743	1734
5°	1734	1755	1746	1753	1750	1756	1764	1758	1745	1754	1738
7.5°	1767	1801	1788	1805	1809	1822	1811	1799	1786	1798	1788
10°	1864	1882	1880	1888	1899	1900	1887	1878	1880	1892	1872
12.5°	1954	1980	1975	1964	1972	1976	1982	1964	1971	1977	1962
15°	2012	1998	2012	2020	2018	2010	2017	2005	1999	2010	2011
17.5°	2011	2040	2039	2040	2043	2022	2056	2044	2035	2049	2027
20°	1994	1997	1999	1991	2004	1985	2007	1989	1992	2012	2002
22.5°	1819	1843	1834	1833	1836	1850	1835	1833	1809	1830	1834
25°	1651	1657	1648	1638	1636	1641	1645	1644	1633	1663	1637
27.5°	1435	1452	1457	1457	1449	1430	1423	1443	1426	1456	1456
30°	1245	1263	1259	1257	1261	1257	1241	1256	1258	1253	1251
32.5°	1086	1107	1099	1101	1093	1081	1103	1097	1092	1110	1120
35°	1017	1012	1015	1016	1010	1005	1003	1011	1017	1034	1035
37.5°	958	966	966	964	956	944	957	962	980	990	992
40°	924	927	920	937	924	921	923	933	938	950	943
42.5°	866	877	873	877	869	875	866	879	891	903	906
45°	821	827	817	818	819	822	820	830	833	848	858
47.5°	772	775	772	770	759	766	773	780	774	786	784
50°	724	727	732	730	722	722	727	727	735	746	742
52.5°	672	671	672	673	667	669	676	677	681	693	690
55°	629	635	633	637	635	628	632	638	640	646	654
57.5°	633	637	635	648	635	623	618	638	639	653	667
60°	566	592	584	598	594	595	588	595	602	598	610
62.5°	514	528	524	521	524	513	531	528	532	542	530
65°	430	437	430	435	433	429	423	424	435	447	443
67.5°	296	289	286	292	293	292	294	304	289	294	291
70°	186	185	183	184	180	182	181	185	187	186	189
72.5°	135	137	138	136	137	137	136	138	140	141	144
75°	114	112	113	113	112	113	113	114	115	117	119
77.5°	91	92	91	93	92	93	92	92	94	95	97
80°	78	77	77	79	76	77	78	78	79	80	81
82.5°	63	63	63	63	63	64	64	63	64	65	65
85°	50	51	51	52	51	51	51	51	51	52	53
87.5°	41	41	41	42	41	41	42	42	43	43	43
90°	38	38	39	39	38	39	39	40	41	41	40
92.5°	30	30	30	30	30	31	31	30	31	31	31
95°	27	27	27	27	27	28	28	28	28	28	29
97.5°	25	25	25	25	25	25	25	26	26	26	26
100°	23	23	23	23	23	24	24	24	24	24	24
102.5°	22	22	22	22	23	23	23	23	23	23	23
105°	20	20	21	21	22	22	22	22	22	22	22
107.5°	19	19	20	21	21	22	21	21	21	21	21
110°	18	18	20	21	21	21	21	21	21	21	21



REPORT NUMBER: G3-2109-403-1  
 CATALOG NUMBER: STW8A2PD-B2

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	16	17	20	21	21	21	21	21	21	21	21
115°	16	17	20	21	21	22	22	21	21	21	21
117.5°	16	17	20	21	22	22	22	21	22	21	21
120°	17	16	20	22	22	23	23	22	22	22	22
122.5°	17	16	20	22	22	23	23	22	22	22	22
125°	18	17	21	23	23	24	24	23	23	23	23
127.5°	18	18	21	24	24	25	25	24	24	24	24
130°	19	19	22	25	25	26	26	25	25	25	25
132.5°	19	19	22	25	26	26	26	26	25	25	26
135°	19	20	23	26	27	27	27	26	26	26	26
137.5°	19	20	23	26	27	27	27	26	26	26	26
140°	20	20	23	26	26	27	27	26	26	26	26
142.5°	18	20	23	25	26	26	26	26	25	25	25
145°	18	19	21	23	24	25	25	25	24	24	24
147.5°	16	17	19	21	22	22	22	22	22	22	21
150°	15	15	16	18	19	20	20	19	19	19	19
152.5°	12	12	13	15	16	16	16	16	16	16	16
155°	10	10	11	12	13	13	13	13	13	13	13
157.5°	7	7	8	9	10	10	10	10	10	10	10
160°	5	5	6	6	7	7	7	7	7	7	6
162.5°	3	3	3	3	4	4	4	4	4	4	4
165°	1	1	1	1	1	1	1	1	1	1	1
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)