

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: STREETWORKS

Report Number: P265660

Luminaire Tested: **ARCH-L-AF72-180-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265660
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-180-D-U-T4W-7027-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 775mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14096 lumens
Efficiency: N/A
Efficacy: 77.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G3

Input Watts (W): 181
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

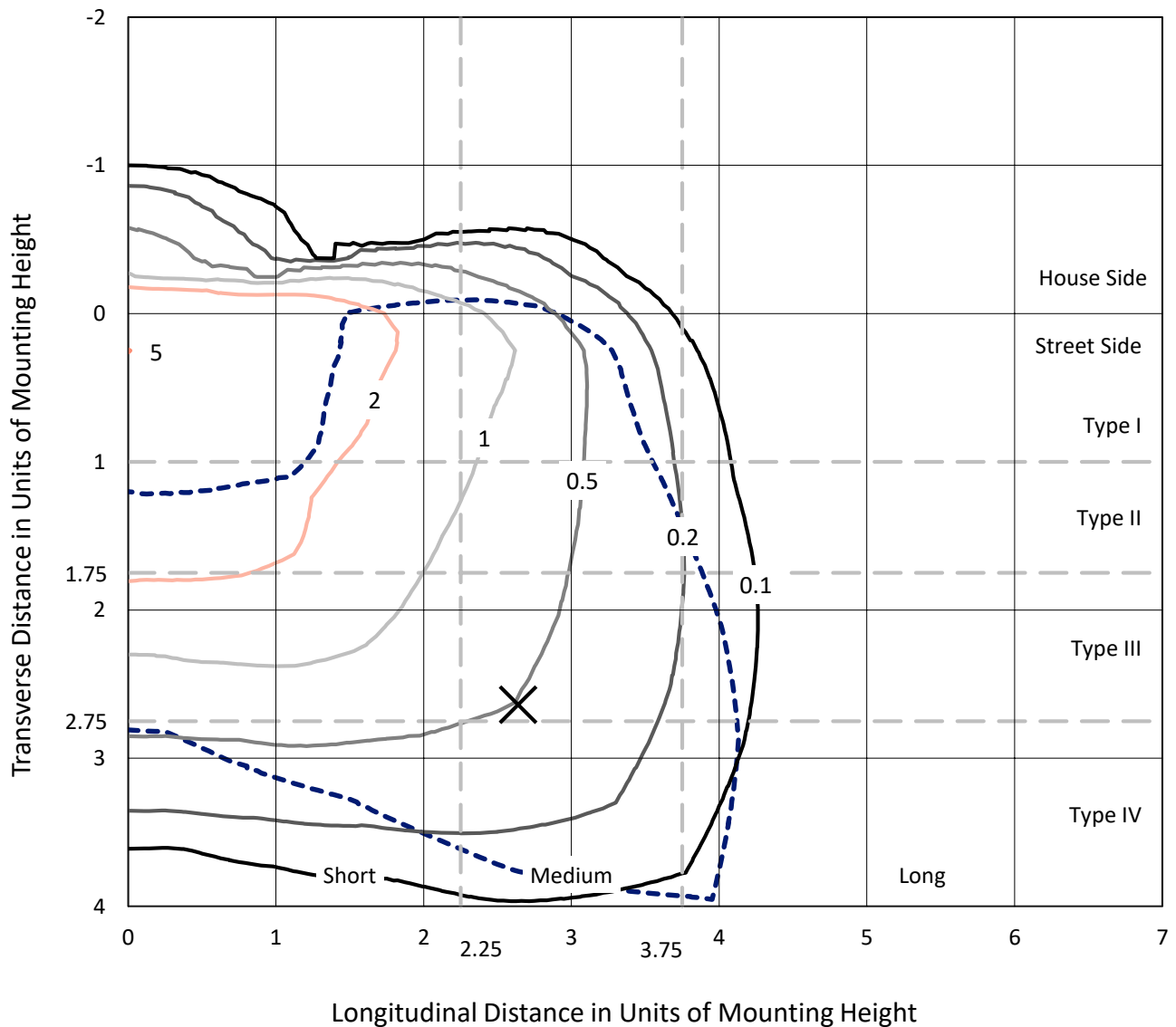


REPORT NUMBER: P265660

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T4W-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

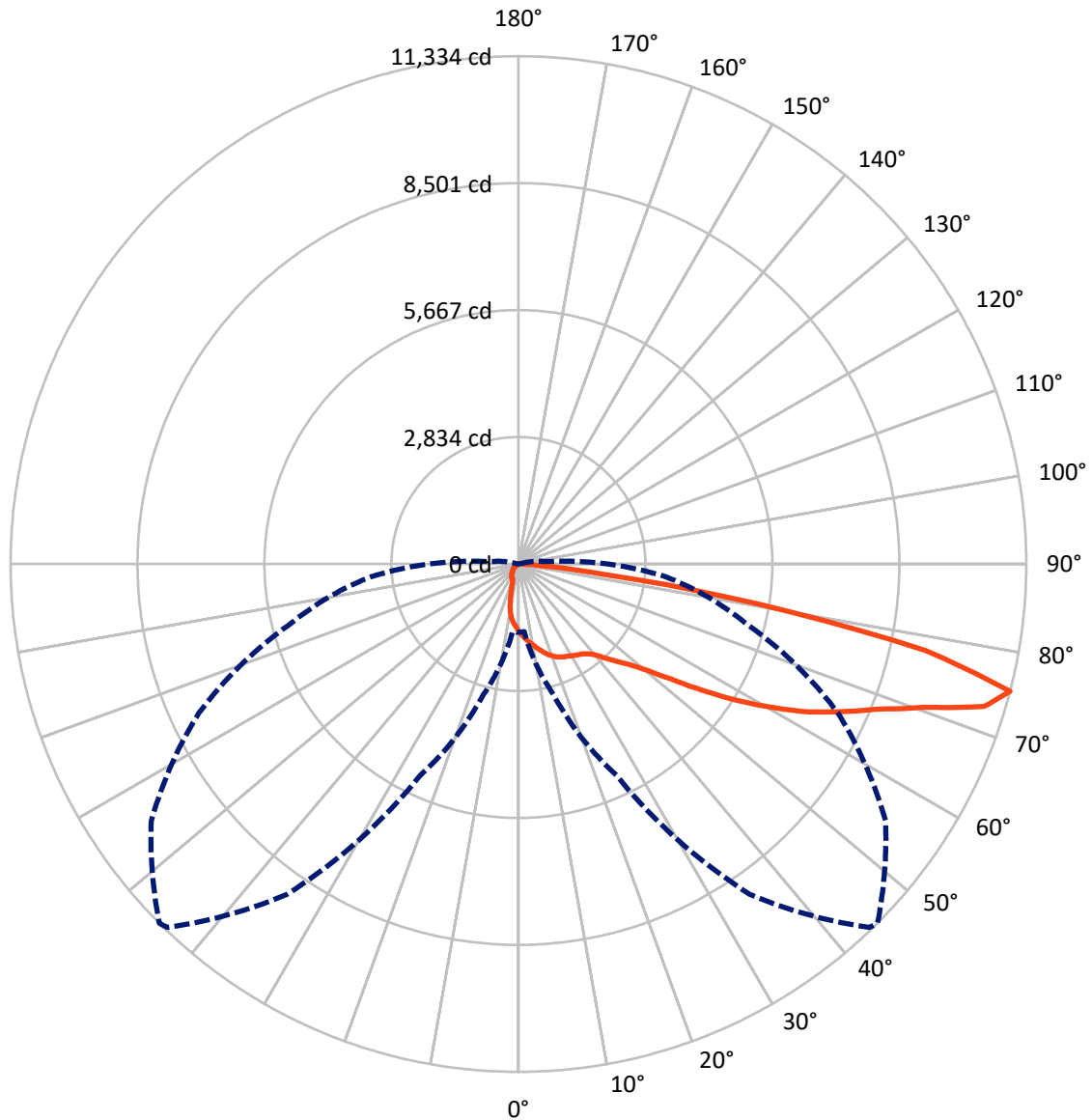


Based on 20 foot mounting height. Maximum calculated value = 5 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P265660

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T4W-7027-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P265660

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T4W-7027-HSS

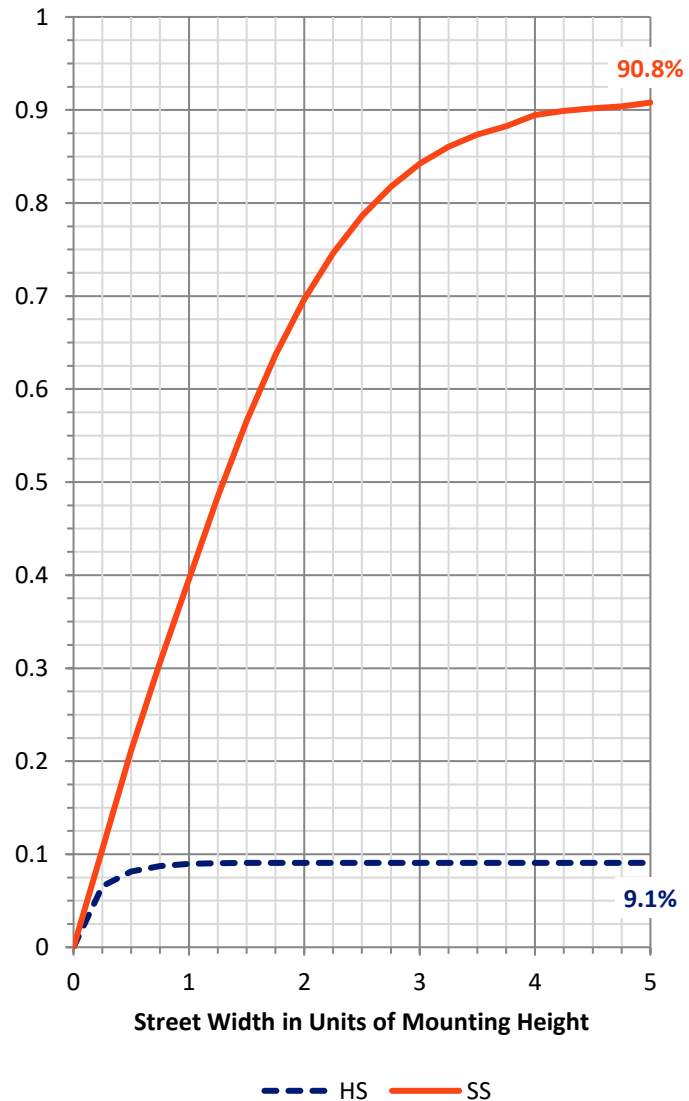
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1289.4	0.0	1289.4
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	12806.7	0.0	12806.7
	% Fixture	90.9	0.0	90.9
Total	Lumens	14096.0	0.0	14096.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.3	1.0
10°-20°	403.1	2.9
20°-30°	667.6	4.7
30°-40°	966.2	6.9
40°-50°	1582.1	11.2
50°-60°	2818.9	20.0
60°-70°	4144.2	29.4
70°-80°	3126.4	22.2
80°-90°	245.3	1.7
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°	14096.0	100.0
0°-180°	14096.0	100.0



REPORT NUMBER: P265660

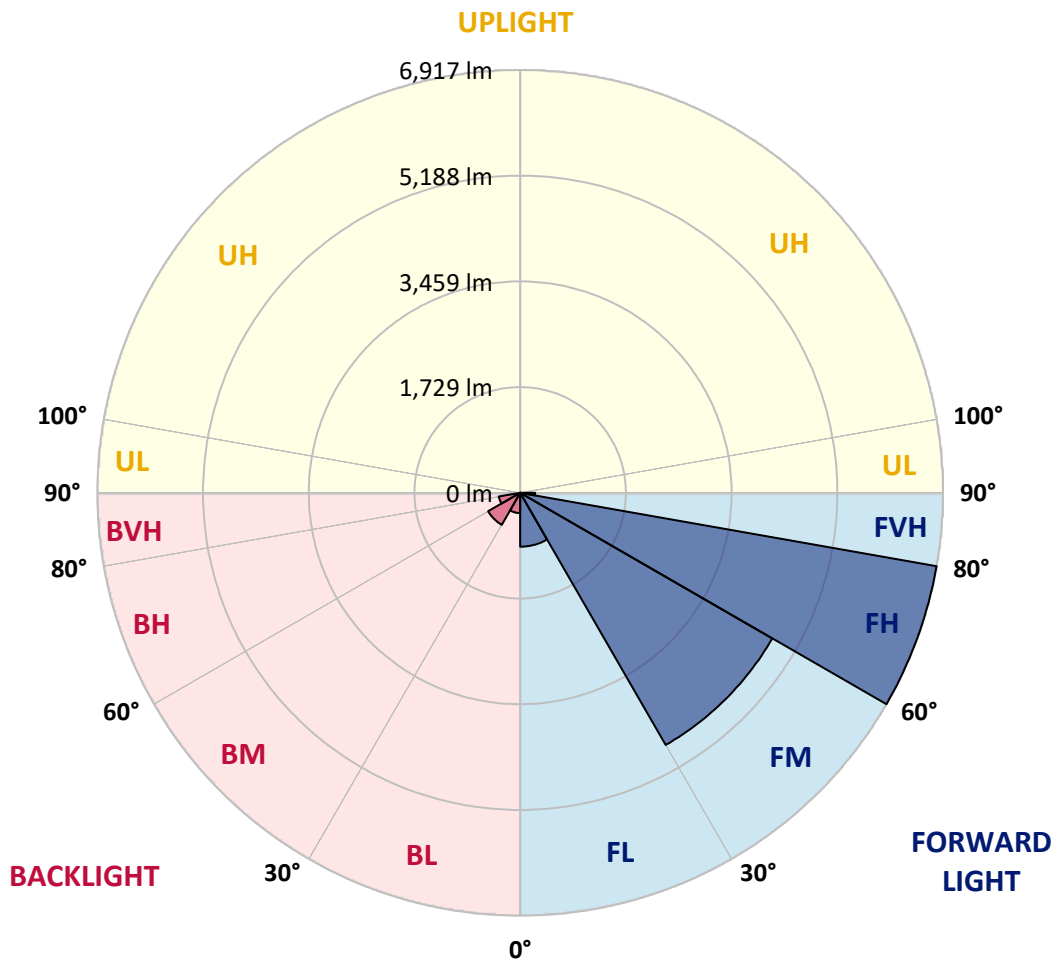
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	881.7	6.3			
FM	(30°-60°)	4763.0	33.8			
FH	(60°-80°)	6917.4	49.1			G3/7500
FVH	(80°-90°)	244.6	1.7			G3/500
BL	(0°-30°)	331.3	2.4	B1/500		
BM	(30°-60°)	604.2	4.3	B1/1000		
BH	(60°-80°)	353.2	2.5	B1/500		G1/500
BVH	(80°-90°)	0.7	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Medium





REPORT NUMBER: P265660

CATALOG NUMBER: ARCH-L-AF72-180-D-U-T4W-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1507.6	1507.6	1507.6	1507.6	1507.6	1507.6	1507.6	1507.6	1507.6	1507.6	1507.6
2.5°	1637.7	1637.7	1634.3	1631.1	1614.3	1597.7	1594.4	1584.4	1554.3	1534.3	1514.4
5°	1774.5	1777.8	1771.2	1754.5	1717.7	1681.1	1677.8	1651.1	1594.4	1554.3	1510.9
7.5°	1904.5	1911.2	1894.5	1864.5	1821.1	1767.9	1764.5	1714.4	1641.1	1584.4	1521.0
10°	2014.7	2014.7	1991.4	1954.6	1907.9	1851.1	1844.5	1787.8	1704.4	1634.3	1551.1
12.5°	2134.7	2131.4	2098.0	2048.0	1994.6	1941.2	1938.0	1867.8	1787.8	1697.7	1594.4
15°	2244.8	2238.1	2194.7	2148.0	2091.3	2034.7	2031.2	1961.3	1877.8	1771.2	1657.7
17.5°	2304.8	2301.5	2261.5	2214.9	2168.1	2124.8	2121.3	2048.0	1957.9	1847.9	1721.2
20°	2314.8	2318.2	2284.7	2244.8	2218.2	2194.7	2194.7	2128.1	2031.2	1914.6	1787.8
22.5°	2318.2	2328.1	2304.8	2251.4	2244.8	2248.1	2254.7	2201.4	2101.3	1991.4	1857.9
25°	2341.5	2354.8	2338.2	2274.8	2268.1	2291.4	2298.1	2274.8	2184.8	2074.6	1938.0
27.5°	2388.2	2401.6	2388.2	2308.1	2298.1	2321.5	2328.1	2341.5	2274.8	2154.8	2021.4
30°	2481.6	2484.9	2454.9	2354.8	2334.9	2364.9	2374.8	2411.6	2358.2	2231.5	2101.3
32.5°	2645.1	2611.7	2521.6	2388.2	2371.5	2404.9	2415.0	2454.9	2434.9	2304.8	2184.8
35°	2978.6	2805.1	2598.3	2434.9	2418.2	2451.7	2464.9	2521.6	2531.7	2408.3	2288.2
37.5°	2975.2	2818.5	2778.5	2525.0	2501.6	2525.0	2541.7	2611.7	2651.7	2545.0	2438.3
40°	3185.4	3118.6	3118.6	2695.1	2618.4	2651.7	2668.3	2738.5	2808.6	2725.1	2615.1
42.5°	3845.9	3802.4	3755.8	3022.0	2781.8	2875.2	2885.1	2928.6	3011.9	2985.2	2855.3
45°	4583.1	4543.0	4362.9	3575.7	3062.1	3078.8	3101.9	3172.1	3292.2	3342.1	3188.8
47.5°	5160.0	5120.0	4966.5	4242.8	3499.0	3352.1	3352.1	3488.9	3675.8	3802.4	3655.7
50°	5623.7	5576.9	5483.6	4953.3	4216.0	3745.8	3725.8	3885.9	4162.7	4359.6	4259.5
52.5°	6074.0	5937.2	5880.5	5687.0	5026.6	4316.1	4262.7	4376.2	4759.8	5003.3	4919.8
55°	6374.2	6354.2	6294.2	6360.8	5877.2	5009.9	4963.2	4986.6	5466.8	5630.3	5526.9
57.5°	6654.4	6651.1	6784.4	7094.6	6804.4	5803.8	5730.4	5693.6	6150.6	6110.6	6200.7
60°	7001.2	6941.2	7251.4	7695.1	7654.9	6577.6	6494.2	6420.8	6674.3	6561.0	7007.9
62.5°	7017.9	7001.2	7631.6	8268.7	8498.9	7364.8	7268.0	7004.5	7131.4	7001.2	7778.5
65°	6380.8	6464.3	7791.7	8572.3	9206.0	8055.2	7938.5	7528.2	7538.2	7451.5	8685.6
67.5°	6237.4	6280.8	7351.5	8899.1	9716.2	8752.4	8642.4	8131.9	8011.9	8018.5	9222.7
70°	5880.5	5947.1	6804.4	8875.8	10119.9	9683.0	9572.9	9019.3	8729.0	8405.5	8809.0
72.5°	4493.0	4606.2	5733.7	7781.7	10009.9	10900.5	10870.4	10143.2	9015.8	7718.3	6664.3
75°	1521.0	1517.6	3011.9	5226.8	8992.6	11274.0	11334.0	10003.2	7865.1	5323.4	3308.7
77.5°	326.9	330.1	620.4	2118.1	5973.9	9052.6	9282.7	7545.0	5073.3	2371.5	757.1
80°	160.1	163.4	256.8	560.4	2388.2	5076.6	5436.9	3879.2	1874.6	473.6	126.8
82.5°	80.0	83.5	133.4	296.9	883.9	1804.5	1927.9	1427.5	536.9	266.8	63.4
85°	30.1	30.1	66.7	176.7	403.6	423.6	520.4	413.6	323.5	216.9	16.7
87.5°	6.6	6.6	36.7	86.7	180.1	133.4	133.4	126.8	196.8	146.8	6.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: ARCH-L-AF72-180-D-U-T4W-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1507.6	1507.6	1507.6	1507.6	1507.6	1507.6	1507.6	1507.6	1507.6	1507.6	1507.6
2.5°	1504.3	1490.9	1467.7	1444.2	1427.5	1407.6	1397.6	1387.5	1384.3	1381.0	1387.5
5°	1487.7	1467.7	1424.3	1387.5	1354.3	1327.5	1307.6	1287.5	1277.5	1270.8	1274.2
7.5°	1487.7	1457.6	1394.2	1337.5	1284.1	1227.4	1170.9	1127.5	1094.0	1074.1	1077.3
10°	1504.3	1464.2	1381.0	1304.2	1204.1	1084.1	960.6	867.3	803.9	767.2	767.2
12.5°	1541.0	1487.7	1384.3	1264.2	1094.0	883.9	697.2	583.7	536.9	510.3	513.7
15°	1591.1	1527.7	1400.8	1210.7	940.6	657.1	487.1	413.6	413.6	420.2	423.6
17.5°	1647.8	1577.8	1414.2	1130.7	743.8	470.4	383.5	376.8	386.9	403.6	403.6
20°	1704.4	1627.6	1420.8	1003.9	556.9	373.5	363.5	363.5	370.2	386.9	390.3
22.5°	1774.5	1691.1	1414.2	847.2	417.0	353.6	350.2	350.2	350.2	370.2	370.2
25°	1847.9	1764.5	1387.5	680.5	353.6	340.2	336.9	333.5	333.5	350.2	353.6
27.5°	1931.3	1841.2	1324.2	520.4	333.5	326.9	323.5	316.9	316.9	330.1	330.1
30°	2014.7	1927.9	1227.4	393.5	316.9	313.6	307.0	300.3	293.6	307.0	307.0
32.5°	2104.6	2018.0	1100.8	313.6	293.6	293.6	290.2	280.2	273.5	280.2	283.5
35°	2224.8	2121.3	957.4	273.5	263.6	263.6	263.6	260.1	246.9	253.5	253.5
37.5°	2384.9	2264.7	790.5	253.5	240.1	233.5	233.5	233.5	223.5	226.8	226.8
40°	2588.3	2431.6	630.4	236.9	223.5	206.8	200.1	203.5	196.8	196.8	193.4
42.5°	2865.2	2611.7	473.6	223.5	210.2	186.8	173.5	170.0	163.4	160.1	160.1
45°	3262.1	2831.8	340.2	210.2	200.1	163.4	150.0	140.0	123.3	113.4	113.4
47.5°	3775.8	3082.1	253.5	196.8	190.1	143.4	126.8	106.7	83.5	76.7	76.7
50°	4402.9	3362.1	213.4	176.7	173.5	126.8	100.2	70.1	46.7	40.1	43.4
52.5°	5013.4	3625.6	190.1	156.8	153.4	110.0	73.4	36.7	20.0	20.0	20.0
55°	5526.9	3812.4	173.5	140.0	133.4	86.7	40.1	16.7	10.1	10.1	10.1
57.5°	5990.5	3919.2	156.8	123.3	106.7	60.0	16.7	6.6	6.6	3.4	3.4
60°	6414.2	3982.5	136.7	106.7	83.5	33.3	6.6	3.4	3.4	0.0	0.0
62.5°	6831.2	4029.3	116.7	86.7	63.4	13.4	3.4	3.4	0.0	0.0	0.0
65°	7148.1	4012.5	93.5	70.1	40.1	6.6	3.4	0.0	0.0	0.0	0.0
67.5°	7138.0	3785.7	70.1	53.4	20.0	3.4	0.0	0.0	0.0	0.0	0.0
70°	6384.2	3188.8	46.7	33.3	6.6	3.4	0.0	0.0	0.0	0.0	0.0
72.5°	4529.7	2044.6	30.1	20.0	3.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	1994.6	620.4	16.7	10.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	390.3	143.4	10.1	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	93.5	16.7	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	40.1	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.1	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.6	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)