

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: P573188

Luminaire Tested: **ARCH-S-PA2-40-827-U-T3-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573188  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-40-827-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 420mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3665 lumens  
Efficiency: N/A  
Efficacy: 84.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G1

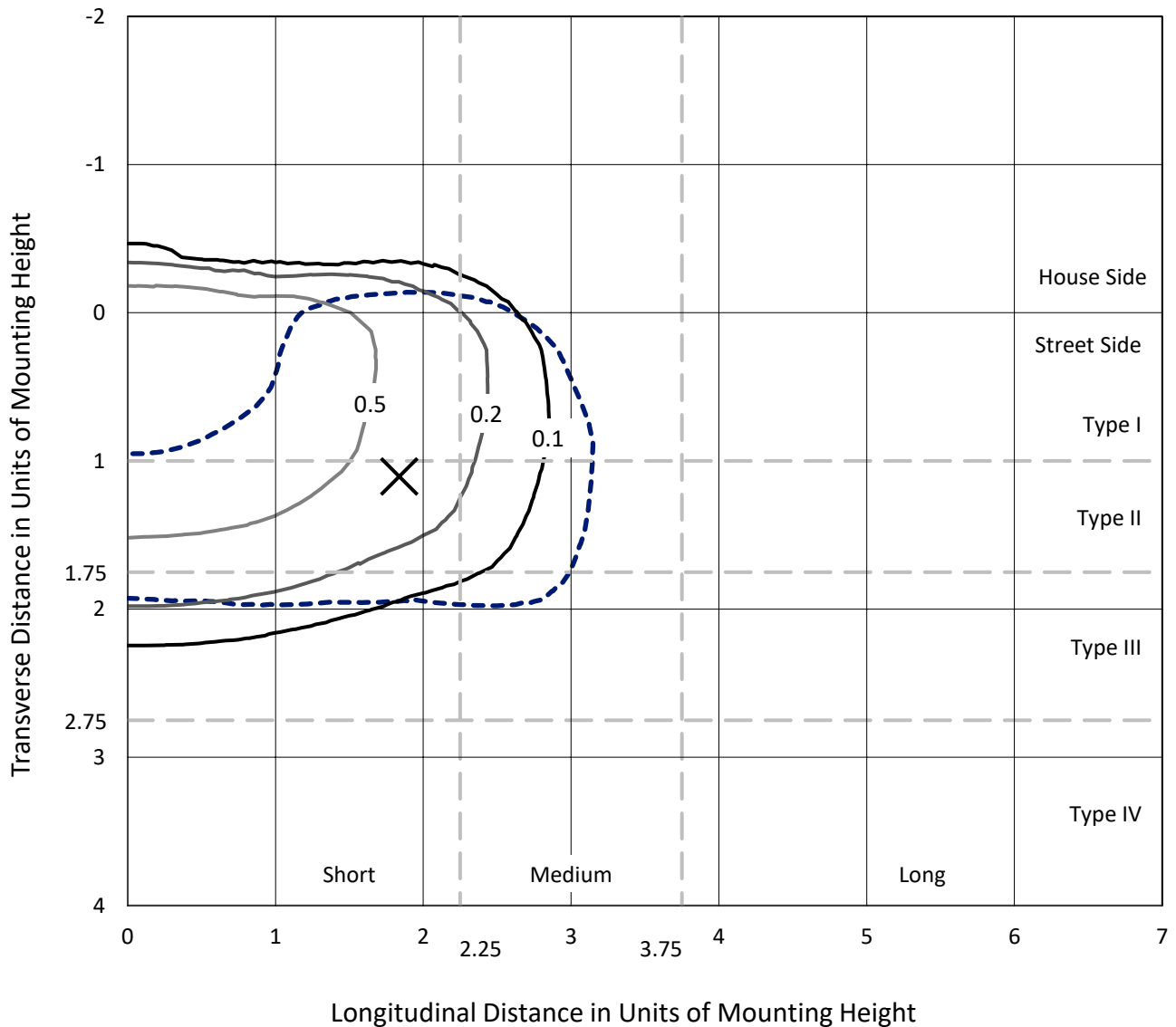
Input Watts (W): 43.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P573188  
 CATALOG NUMBER: ARCH-S-PA2-40-827-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

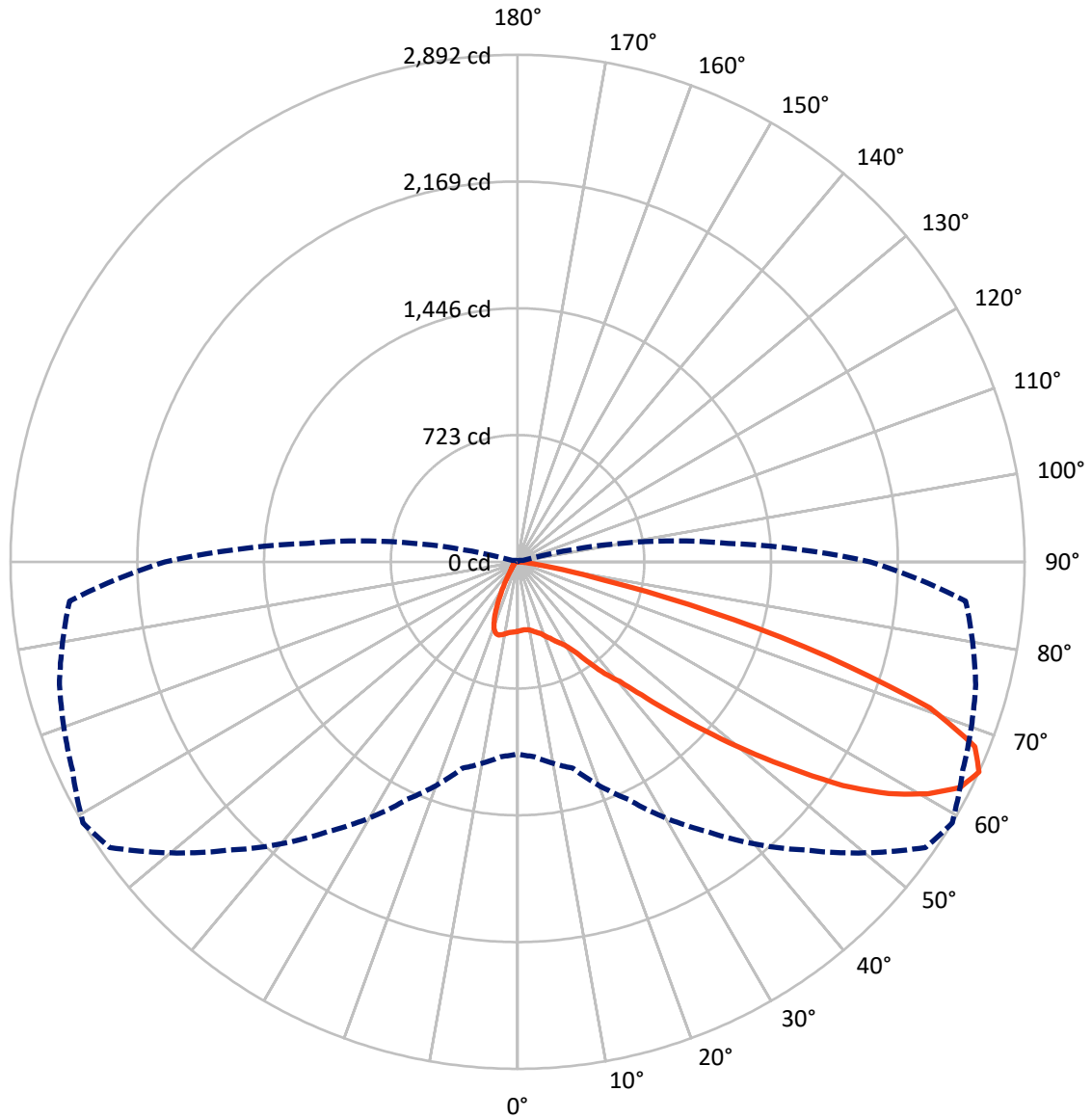
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc  
 Type III - Short - N/A

REPORT NUMBER: P573188  
CATALOG NUMBER: ARCH-S-PA2-40-827-U-T3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P573188  
 CATALOG NUMBER: ARCH-S-PA2-40-827-U-T3-HSS

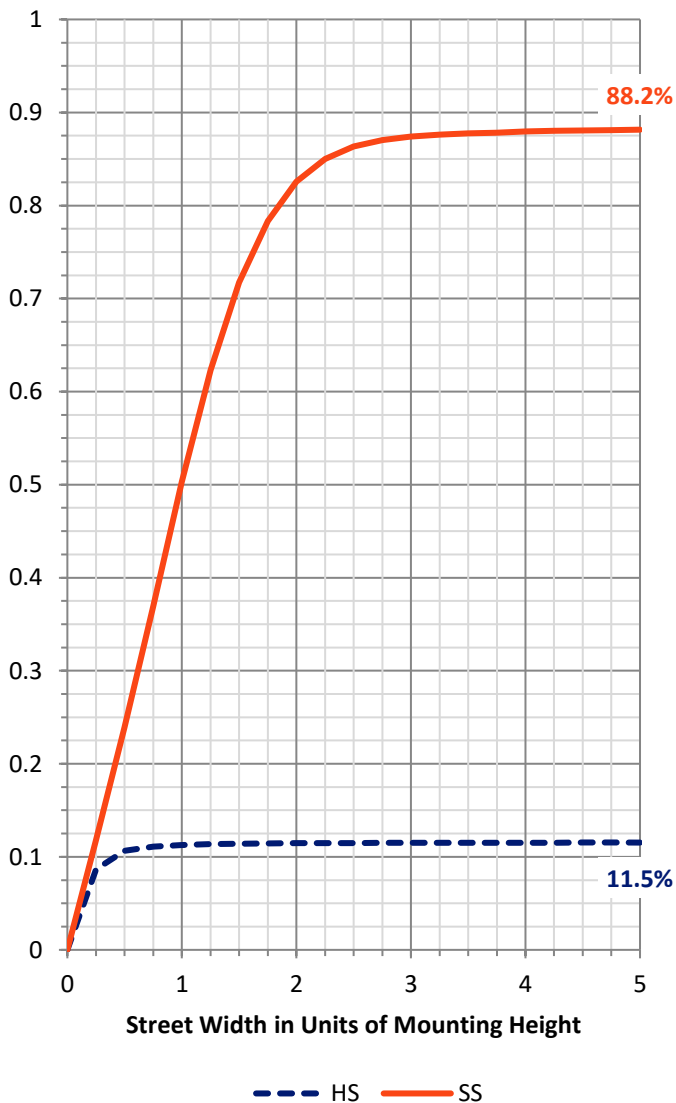
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	427.5	0.0	427.5
	% Fixture	11.7	0.0	11.7
<b>Street Side</b>	Lumens	3237.4	0.0	3237.4
	% Fixture	88.3	0.0	88.3
<b>Total</b>	Lumens	3665.0	0.0	3665.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.4	1.0
10°-20°	106.3	2.9
20°-30°	180.6	4.9
30°-40°	319.9	8.7
40°-50°	603.4	16.5
50°-60°	1020.9	27.9
60°-70°	1061.5	29.0
70°-80°	318.3	8.7
80°-90°	16.7	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°	3665.0	100.0
0°-180°	3665.0	100.0

**Coefficient of Utilization**



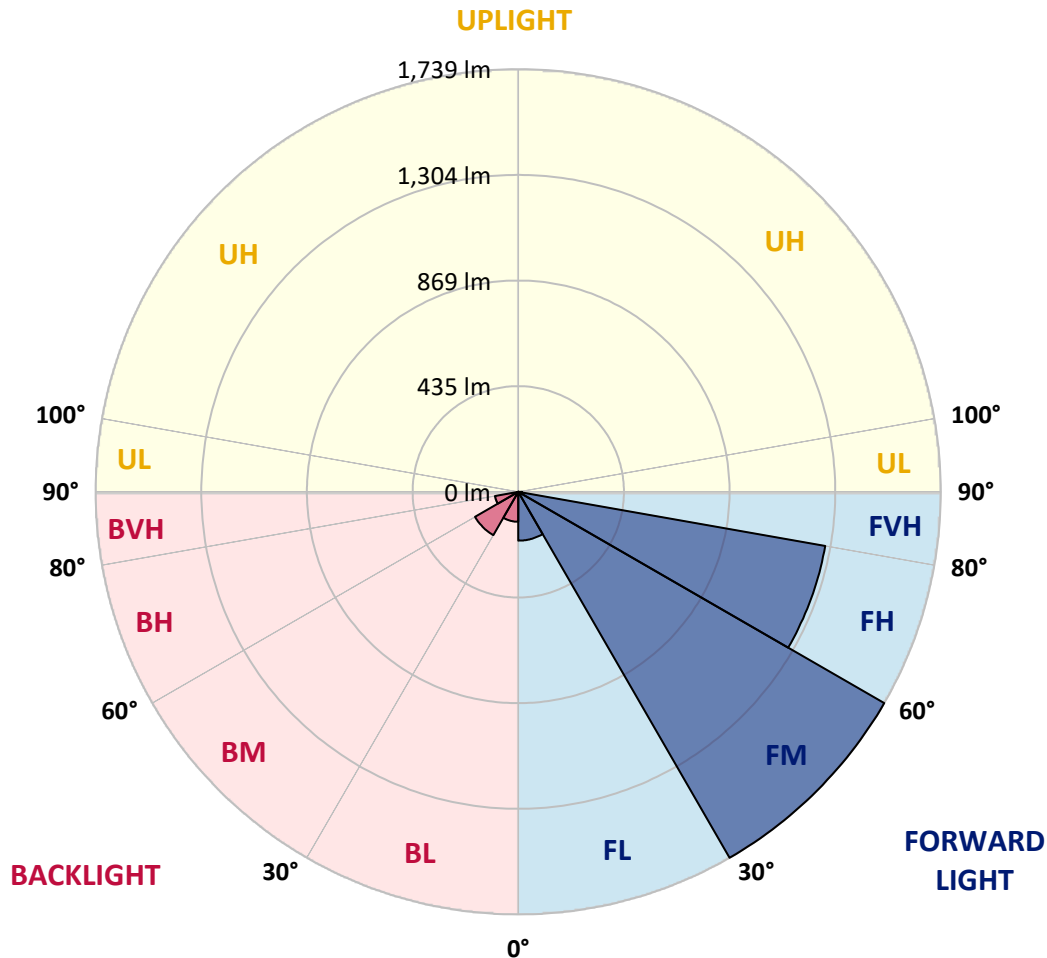
REPORT NUMBER: P573188  
 CATALOG NUMBER: ARCH-S-PA2-40-827-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	201.0	5.5			
FM (30°-60°)	1738.7	47.4			
FH (60°-80°)	1282.5	35.0			G1/1800
FVH (80°-90°)	15.3	0.4			G1/100
BL (0°-30°)	123.3	3.4	B1/500		
BM (30°-60°)	205.5	5.6	B0/220		
BH (60°-80°)	97.3	2.7	B0/110		G0/110
BVH (80°-90°)	1.4	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-G1**

Type III Short





REPORT NUMBER: P573188

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	396.0	396.0	396.0	396.0	396.0	396.0	396.0	396.0	396.0	396.0	396.0
2.5°	385.4	384.0	384.0	386.7	388.0	389.4	392.0	392.0	392.0	394.7	396.0
5°	366.7	366.7	368.0	370.7	376.0	380.0	388.0	389.4	390.7	397.4	400.0
7.5°	354.7	354.7	356.0	361.4	368.0	377.4	388.0	390.7	394.7	404.0	410.7
10°	353.4	352.0	354.7	360.0	368.0	380.0	392.0	396.0	404.0	416.0	425.4
12.5°	357.4	356.0	358.7	364.0	372.0	384.0	400.0	406.7	416.0	432.0	445.4
15°	360.0	358.7	361.4	368.0	377.4	392.0	410.7	418.7	430.7	453.4	466.7
17.5°	368.0	366.7	368.0	373.4	382.7	398.7	422.7	430.7	450.7	476.0	490.7
20°	404.0	402.7	394.7	392.0	393.4	408.0	438.7	452.0	476.0	508.1	518.7
22.5°	478.7	473.4	458.7	434.7	418.7	424.0	458.7	473.4	505.4	541.4	549.4
25°	578.7	574.7	553.4	512.1	466.7	453.4	481.4	501.4	540.1	580.1	577.4
27.5°	692.1	684.1	664.1	606.7	545.4	501.4	509.4	526.7	569.4	612.1	598.7
30°	790.7	788.1	765.4	717.4	645.4	580.1	552.1	561.4	600.1	645.4	629.4
32.5°	881.4	873.4	854.8	809.4	742.7	676.1	620.1	620.1	652.1	705.4	681.4
35°	981.4	976.1	953.4	908.1	844.1	765.4	714.7	709.4	736.1	796.1	744.1
37.5°	1084.1	1070.8	1060.1	1013.4	949.4	881.4	820.1	808.1	821.4	865.4	801.4
40°	1212.1	1212.1	1188.1	1145.4	1085.4	1013.4	928.1	897.4	893.4	950.8	901.4
42.5°	1361.5	1357.5	1337.5	1297.5	1240.1	1173.5	1065.4	1037.4	1034.8	1104.1	1045.4
45°	1533.5	1530.8	1506.8	1473.5	1433.5	1360.1	1253.5	1225.5	1209.5	1289.5	1220.1
47.5°	1690.8	1681.5	1673.5	1677.5	1654.8	1572.2	1472.1	1438.8	1437.5	1500.2	1410.8
50°	1798.8	1793.5	1821.5	1848.2	1890.9	1838.9	1720.2	1690.8	1668.2	1750.8	1609.5
52.5°	1869.5	1866.9	1922.9	1998.9	2086.9	2082.9	1977.5	1960.2	1941.5	1964.2	1786.8
55°	1897.5	1897.5	1964.2	2104.2	2258.9	2325.6	2276.2	2252.2	2186.9	2140.2	1981.5
57.5°	1864.2	1860.2	1946.9	2129.5	2365.6	2502.9	2524.3	2496.3	2393.6	2341.6	2197.6
60°	1722.8	1725.5	1828.2	2058.9	2357.6	2574.9	2712.3	2686.9	2584.3	2506.9	2378.9
62.5°	1458.8	1481.5	1589.5	1840.2	2186.9	2517.6	2820.3	2833.6	2722.9	2626.9	2540.3
65°	1096.1	1116.1	1218.8	1496.1	1876.2	2325.6	2840.3	2892.3	2802.9	2705.6	2565.6
67.5°	666.7	673.4	798.7	1008.1	1381.5	1937.5	2700.3	2813.6	2749.6	2589.6	2314.9
70°	310.7	328.0	389.4	550.7	874.8	1426.8	2333.6	2493.6	2421.6	2222.9	1760.2
72.5°	121.3	126.7	165.3	254.7	464.0	897.4	1741.5	1848.2	1798.8	1578.8	1049.4
75°	60.0	64.0	80.0	121.3	212.0	370.7	1064.1	1133.4	1052.1	793.4	444.0
77.5°	44.0	44.0	53.3	74.7	116.0	137.3	448.0	502.7	474.7	306.7	121.3
80°	29.3	32.0	37.3	50.7	73.3	66.7	169.4	201.4	168.0	94.7	42.7
82.5°	17.3	18.7	28.0	36.0	49.3	38.7	57.3	64.0	69.3	46.7	20.0
85°	9.3	9.3	18.7	26.7	26.7	17.3	20.0	22.7	26.7	28.0	10.7
87.5°	2.7	2.7	12.0	16.0	10.7	9.3	10.7	10.7	12.0	14.7	5.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P573188

CATALOG NUMBER: ARCH-S-PA2-40-827-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	396.0	396.0	396.0	396.0	396.0	396.0	396.0	396.0	396.0	396.0	396.0
2.5°	397.4	397.4	398.7	398.7	400.0	400.0	400.0	400.0	401.4	402.7	402.7
5°	401.4	402.7	402.7	402.7	402.7	400.0	398.7	397.4	397.4	398.7	398.7
7.5°	412.0	413.4	412.0	409.4	405.4	400.0	394.7	394.7	393.4	394.7	393.4
10°	428.0	428.0	426.7	420.0	413.4	402.7	392.0	384.0	378.7	377.4	374.7
12.5°	448.0	448.0	444.0	432.0	420.0	400.0	372.0	345.4	324.0	314.7	312.0
15°	468.0	468.0	462.7	445.4	421.4	373.4	314.7	258.7	226.7	213.4	205.4
17.5°	492.0	489.4	480.0	456.0	406.7	320.0	225.4	168.0	142.7	130.7	130.7
20°	517.4	514.7	497.4	457.4	369.4	229.4	146.7	116.0	109.3	106.7	106.7
22.5°	545.4	538.7	512.1	446.7	290.7	156.0	110.7	102.7	100.0	98.7	98.7
25°	568.1	557.4	522.7	417.4	208.0	109.3	97.3	94.7	89.3	88.0	85.3
27.5°	585.4	569.4	526.7	354.7	137.3	90.7	86.7	81.3	76.0	70.7	70.7
30°	608.1	588.1	529.4	276.0	93.3	78.7	74.7	68.0	61.3	56.0	56.0
32.5°	653.4	624.1	530.7	193.4	77.3	69.3	61.3	53.3	46.7	44.0	42.7
35°	702.7	662.7	516.1	125.3	68.0	58.7	49.3	42.7	36.0	34.7	34.7
37.5°	757.4	720.1	484.0	85.3	60.0	49.3	40.0	33.3	29.3	28.0	28.0
40°	849.4	805.4	430.7	68.0	52.0	41.3	33.3	28.0	25.3	24.0	24.0
42.5°	981.4	905.4	364.0	58.7	45.3	34.7	26.7	22.7	21.3	20.0	20.0
45°	1133.4	1017.4	286.7	53.3	40.0	29.3	22.7	20.0	18.7	17.3	17.3
47.5°	1308.1	1133.4	226.7	46.7	34.7	25.3	20.0	17.3	16.0	14.7	14.7
50°	1473.5	1224.1	170.7	41.3	30.7	21.3	17.3	16.0	14.7	13.3	13.3
52.5°	1609.5	1285.5	129.3	36.0	26.7	18.7	16.0	14.7	12.0	12.0	12.0
55°	1773.5	1333.5	98.7	32.0	24.0	17.3	14.7	12.0	10.7	9.3	9.3
57.5°	1916.2	1350.8	72.0	28.0	21.3	16.0	13.3	10.7	8.0	6.7	6.7
60°	2012.2	1336.1	52.0	24.0	18.7	13.3	10.7	8.0	5.3	4.0	4.0
62.5°	2080.2	1304.1	40.0	21.3	16.0	12.0	9.3	6.7	4.0	2.7	2.7
65°	2012.2	1205.5	32.0	18.7	13.3	10.7	6.7	5.3	2.7	1.3	1.3
67.5°	1740.2	1010.8	25.3	16.0	12.0	9.3	6.7	4.0	1.3	0.0	0.0
70°	1250.8	721.4	21.3	14.7	10.7	8.0	5.3	2.7	1.3	0.0	0.0
72.5°	697.4	372.0	20.0	13.3	10.7	8.0	5.3	2.7	1.3	0.0	0.0
75°	282.7	128.0	18.7	13.3	10.7	6.7	5.3	2.7	1.3	0.0	0.0
77.5°	82.7	44.0	16.0	12.0	10.7	8.0	5.3	2.7	1.3	0.0	0.0
80°	29.3	20.0	12.0	10.7	8.0	6.7	5.3	4.0	1.3	0.0	0.0
82.5°	13.3	8.0	5.3	4.0	4.0	4.0	4.0	2.7	1.3	0.0	0.0
85°	5.3	4.0	2.7	1.3	1.3	1.3	1.3	1.3	1.3	0.0	0.0
87.5°	4.0	2.7	1.3	1.3	1.3	1.3	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)