

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: P397945

Luminaire Tested: **ARCH-S-PA1-60-827-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397945  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-60-827-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4763 lumens  
Efficiency: N/A  
Efficacy: 74.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 64  
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

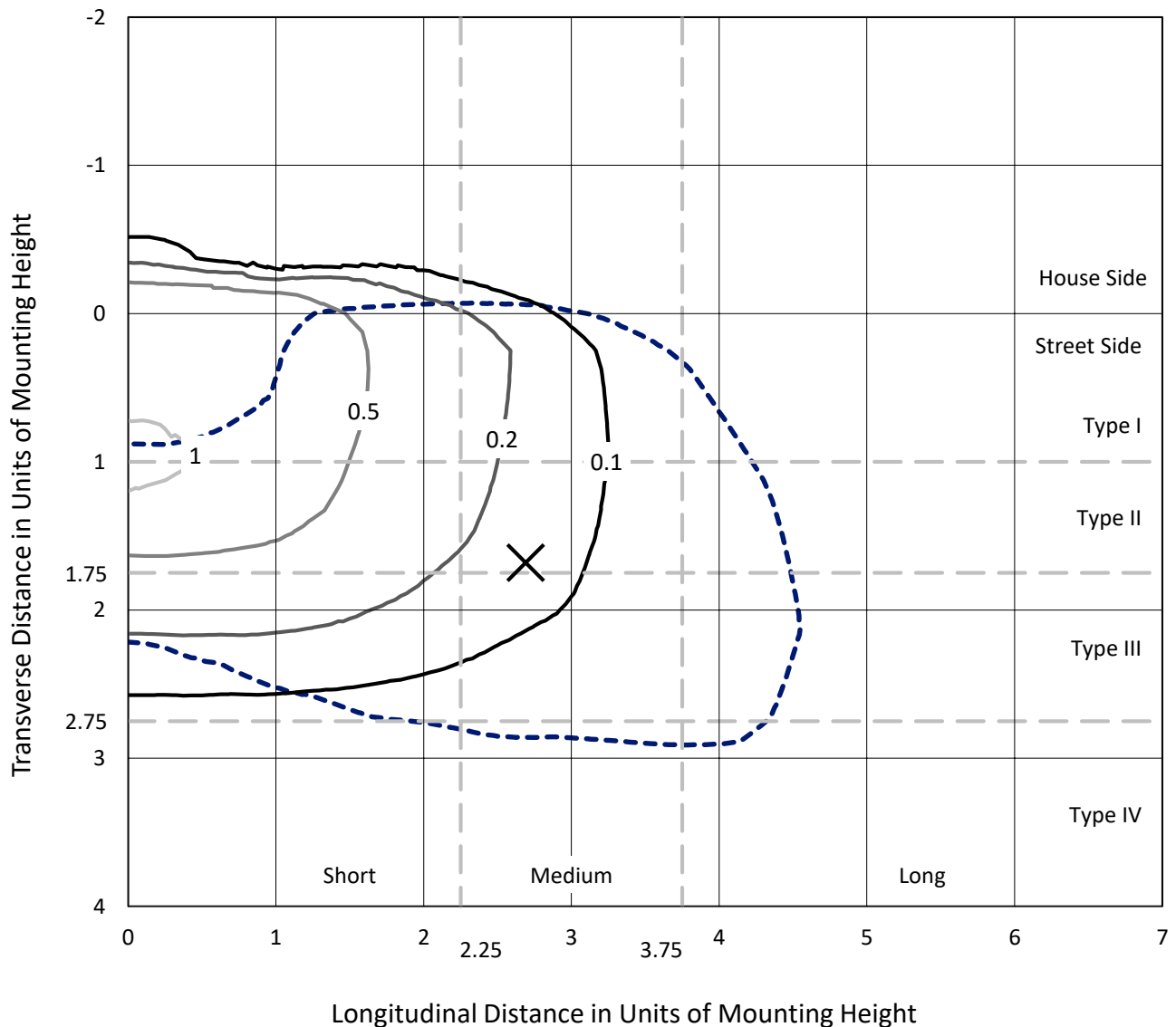


REPORT NUMBER: P397945

CATALOG NUMBER: ARCH-S-PA1-60-827-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

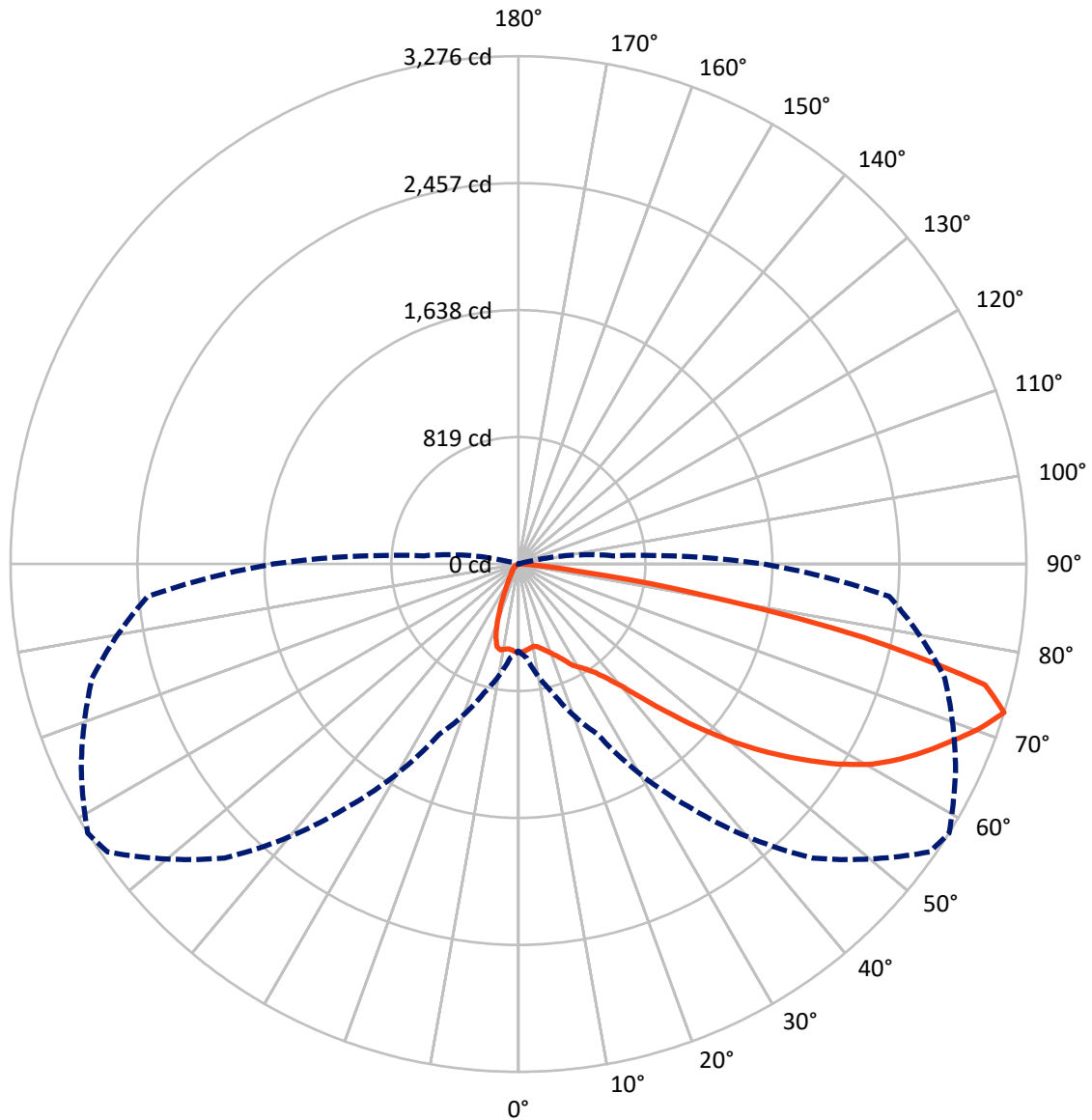


Based on 25 foot mounting height. Maximum calculated value = 1.1 fc  
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P397945

CATALOG NUMBER: ARCH-S-PA1-60-827-U-T3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P397945

CATALOG NUMBER: ARCH-S-PA1-60-827-U-T3-HSS

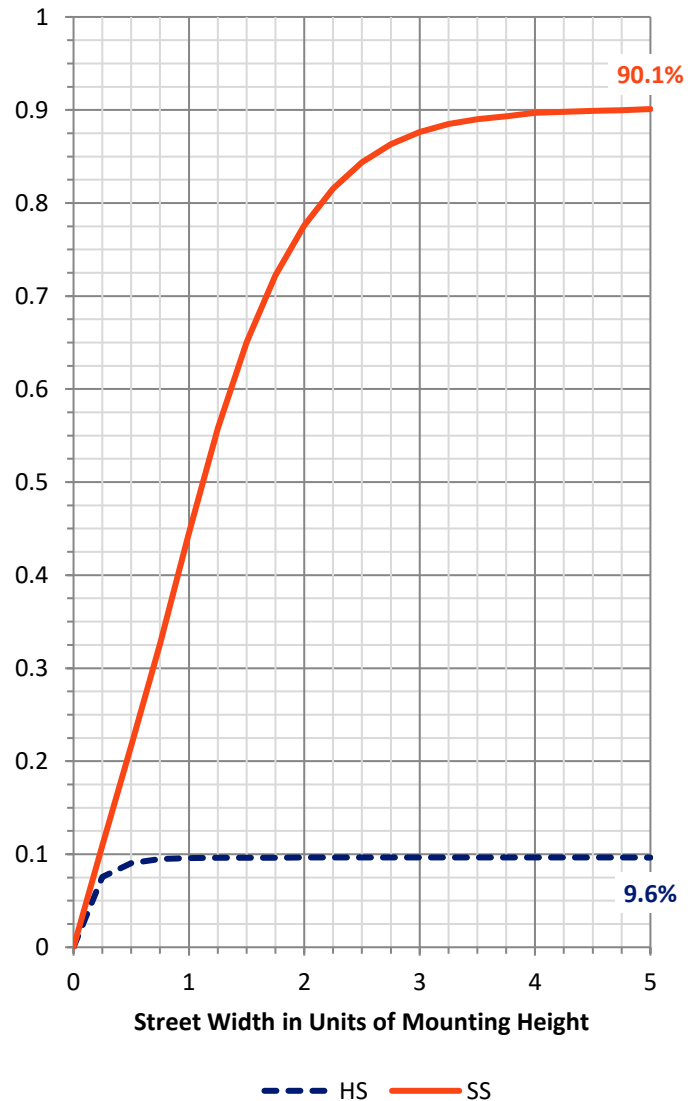
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	463.2	0.0	463.2
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	4299.8	0.0	4299.8
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	4763.0	0.0	4763.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.5	1.1
10°-20°	136.6	2.9
20°-30°	214.6	4.5
30°-40°	370.1	7.8
40°-50°	704.2	14.8
50°-60°	1115.2	23.4
60°-70°	1301.3	27.3
70°-80°	815.0	17.1
80°-90°	53.5	1.1
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°	4763.0	100.0
0°-180°	4763.0	100.0



REPORT NUMBER: P397945

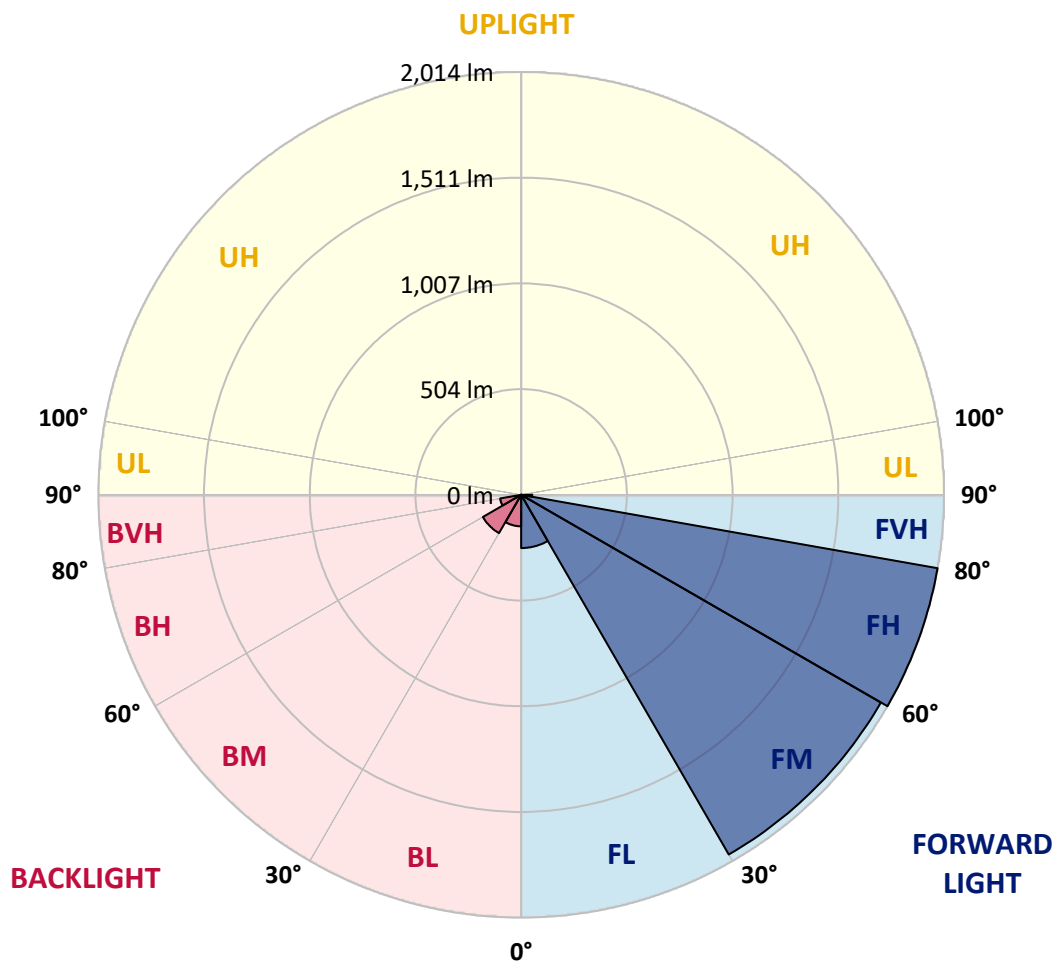
CATALOG NUMBER: ARCH-S-PA1-60-827-U-T3-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	253.7	5.3			
FM	(30°-60°)	1978.8	41.5			
FH	(60°-80°)	2014.4	42.3			G2/5000
FVH	(80°-90°)	53.0	1.1			G1/100
BL	(0°-30°)	150.0	3.1	B1/500		
BM	(30°-60°)	210.8	4.4	B0/220		
BH	(60°-80°)	101.9	2.1	B0/110		G0/110
BVH	(80°-90°)	0.5	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-G2**

Type IV Medium





REPORT NUMBER: P397945

CATALOG NUMBER: ARCH-S-PA1-60-827-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	571.5	571.5	571.5	571.5	571.5	571.5	571.5	571.5	571.5	571.5	571.5
2.5°	569.0	566.4	565.6	564.7	565.6	566.4	563.9	566.4	564.7	565.6	567.3
5°	548.5	546.0	545.1	546.0	548.5	552.8	554.5	557.1	557.1	559.6	560.5
7.5°	525.5	523.8	523.0	524.7	529.8	539.2	544.3	547.7	551.1	556.2	561.3
10°	512.8	511.9	511.1	513.6	518.7	527.2	534.1	539.2	551.9	566.4	575.8
12.5°	504.2	504.2	505.9	511.1	517.9	524.7	540.9	547.7	567.3	589.4	602.2
15°	497.4	497.4	500.0	509.4	518.7	534.9	558.8	566.4	589.4	616.7	633.7
17.5°	492.3	494.0	495.7	505.1	523.0	550.2	578.3	589.4	617.5	647.3	666.1
20°	493.2	494.9	495.7	505.1	530.6	568.1	603.9	616.7	649.0	680.6	699.3
22.5°	498.3	500.8	501.7	514.5	544.3	586.9	632.9	647.3	682.3	715.5	730.0
25°	519.6	521.3	516.2	527.2	563.9	615.8	670.3	685.7	720.6	751.3	763.2
27.5°	592.0	593.7	565.6	552.8	579.2	639.7	716.3	737.6	781.1	801.5	803.2
30°	748.7	750.4	695.0	634.6	615.8	660.1	741.9	771.7	827.9	850.9	840.7
32.5°	950.6	948.9	873.1	783.6	702.7	695.9	778.5	810.0	871.4	893.5	885.8
35°	1153.3	1155.8	1091.1	956.5	840.7	763.2	825.4	862.0	936.1	967.6	954.0
37.5°	1292.1	1309.2	1281.0	1135.4	1010.2	887.5	901.2	940.3	1033.2	1075.8	1046.8
40°	1488.0	1483.8	1415.6	1308.3	1197.6	1071.5	1023.8	1042.6	1149.0	1206.1	1160.9
42.5°	1751.2	1742.7	1626.9	1522.1	1398.6	1295.5	1198.4	1195.0	1281.9	1348.3	1282.8
45°	1989.7	1976.9	1897.7	1796.4	1660.9	1542.5	1411.4	1381.6	1442.0	1498.2	1421.6
47.5°	2179.7	2158.4	2102.1	2048.5	2015.3	1831.3	1634.5	1589.4	1620.0	1661.8	1553.6
50°	2404.5	2345.7	2264.0	2231.6	2300.6	2158.4	1849.2	1805.7	1804.0	1827.9	1689.9
52.5°	2506.7	2400.3	2354.3	2381.5	2503.3	2462.4	2080.8	2018.7	1994.0	1996.5	1816.8
55°	2383.2	2371.3	2396.0	2481.2	2640.5	2616.6	2303.2	2226.5	2189.9	2143.9	1938.6
57.5°	2242.7	2279.3	2377.3	2539.9	2814.2	2777.6	2522.1	2435.2	2367.9	2262.3	2074.0
60°	2113.2	2150.7	2312.5	2553.6	2909.6	2932.6	2704.3	2621.7	2522.1	2383.2	2223.1
62.5°	1916.5	1945.4	2172.8	2534.0	2867.9	3022.9	2831.3	2769.1	2676.2	2498.2	2394.3
65°	1695.0	1713.7	1938.6	2377.3	2786.1	3012.7	2936.0	2901.1	2810.8	2618.3	2563.8
67.5°	1452.3	1474.4	1661.8	2095.3	2626.0	2965.0	3034.8	3031.4	2928.4	2751.2	2686.5
70°	1172.9	1174.6	1329.6	1737.6	2346.6	2869.6	3157.5	3165.1	3040.8	2850.8	2691.6
72.5°	561.3	607.3	862.0	1212.9	1907.1	2682.2	3237.5	3275.9	3111.5	2847.4	2401.1
75°	128.6	132.9	251.3	576.6	1118.4	2058.7	3037.4	3108.9	2939.4	2462.4	1691.6
77.5°	46.8	49.4	70.7	168.6	430.1	1063.8	2173.7	2278.5	2172.8	1591.9	799.8
80°	31.5	30.7	36.6	75.0	197.6	301.5	1111.5	1173.7	1071.5	543.4	191.6
82.5°	16.2	17.0	25.6	41.7	132.9	104.8	371.4	403.7	332.2	109.0	35.8
85°	7.7	7.7	14.5	26.4	56.2	36.6	82.6	99.7	89.4	47.7	11.9
87.5°	7.7	7.7	13.6	17.0	29.0	15.3	20.4	25.6	23.8	25.6	4.3
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: P397945

CATALOG NUMBER: ARCH-S-PA1-60-827-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	571.5	571.5	571.5	571.5	571.5	571.5	571.5	571.5	571.5	571.5	571.5
2.5°	567.3	566.4	565.6	567.3	566.4	568.1	568.1	569.8	569.8	568.1	567.3
5°	559.6	557.9	556.2	556.2	555.3	557.1	562.2	566.4	567.3	564.7	563.9
7.5°	560.5	560.5	558.8	555.3	549.4	549.4	549.4	554.5	557.1	555.3	554.5
10°	575.8	576.6	572.4	564.7	554.5	545.1	527.2	500.8	476.1	469.3	466.8
12.5°	602.2	603.0	594.5	580.9	559.6	504.2	436.1	373.1	324.5	310.9	308.3
15°	633.7	634.6	619.2	597.1	532.4	403.7	302.4	230.8	188.2	178.0	177.2
17.5°	666.1	664.4	641.4	598.8	451.4	286.2	184.0	147.4	136.3	133.7	134.6
20°	697.6	692.5	661.0	567.3	347.5	187.4	134.6	126.1	123.5	121.8	121.8
22.5°	726.6	716.3	677.1	505.1	243.6	134.6	120.1	118.4	115.0	112.4	111.6
25°	755.5	741.0	687.4	424.2	163.5	117.5	113.3	109.9	105.6	102.2	101.4
27.5°	790.4	770.0	682.3	322.0	122.7	109.0	105.6	100.5	94.5	89.4	87.7
30°	823.7	800.7	653.3	222.3	104.8	100.5	95.4	87.7	80.1	74.1	72.4
32.5°	865.4	839.0	601.3	145.7	91.1	87.7	82.6	73.3	63.0	56.2	54.5
35°	925.0	895.2	534.9	102.2	80.1	74.1	67.3	57.1	46.0	40.9	40.0
37.5°	1008.5	968.5	451.4	82.6	70.7	62.2	52.0	41.7	34.1	29.8	29.0
40°	1110.7	1049.4	358.6	73.3	63.0	52.0	39.2	29.8	24.7	21.3	21.3
42.5°	1221.4	1125.2	264.0	67.3	55.4	42.6	29.0	21.3	17.9	16.2	15.3
45°	1335.6	1192.5	178.0	62.2	48.6	32.4	20.4	14.5	11.9	11.9	11.1
47.5°	1454.0	1237.6	115.0	56.2	40.9	23.8	13.6	10.2	8.5	8.5	8.5
50°	1571.5	1261.5	81.8	51.1	33.2	16.2	10.2	7.7	6.8	6.8	6.8
52.5°	1656.7	1246.1	65.6	44.3	25.6	11.9	7.7	6.0	5.1	5.1	5.1
55°	1730.8	1219.7	57.1	38.3	18.7	8.5	6.0	5.1	4.3	4.3	4.3
57.5°	1806.6	1185.6	51.1	32.4	13.6	6.0	4.3	3.4	3.4	3.4	3.4
60°	1875.6	1127.7	44.3	25.6	9.4	4.3	3.4	2.6	2.6	2.6	2.6
62.5°	1942.9	1078.3	38.3	19.6	6.8	3.4	1.7	1.7	0.9	0.9	0.9
65°	1981.2	1011.9	30.7	12.8	4.3	2.6	0.9	0.9	0.0	0.0	0.0
67.5°	1969.3	932.7	21.3	7.7	2.6	1.7	0.9	0.0	0.0	0.0	0.0
70°	1886.6	826.2	12.8	4.3	2.6	1.7	0.9	0.0	0.0	0.0	0.0
72.5°	1580.0	611.6	7.7	3.4	1.7	0.9	0.0	0.0	0.0	0.0	0.0
75°	1055.3	281.1	4.3	2.6	0.9	0.9	0.0	0.0	0.0	0.0	0.0
77.5°	482.9	84.3	2.6	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	97.1	22.1	1.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	20.4	4.3	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	4.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	0.9	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)