

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: P397873

Luminaire Tested: **ARCH-S-PA1-50-827-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397873  
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-PA1-50-827-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 670mA 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: 4148 lumens  
Efficiency: N/A  
Efficacy: 76.8 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 - G1

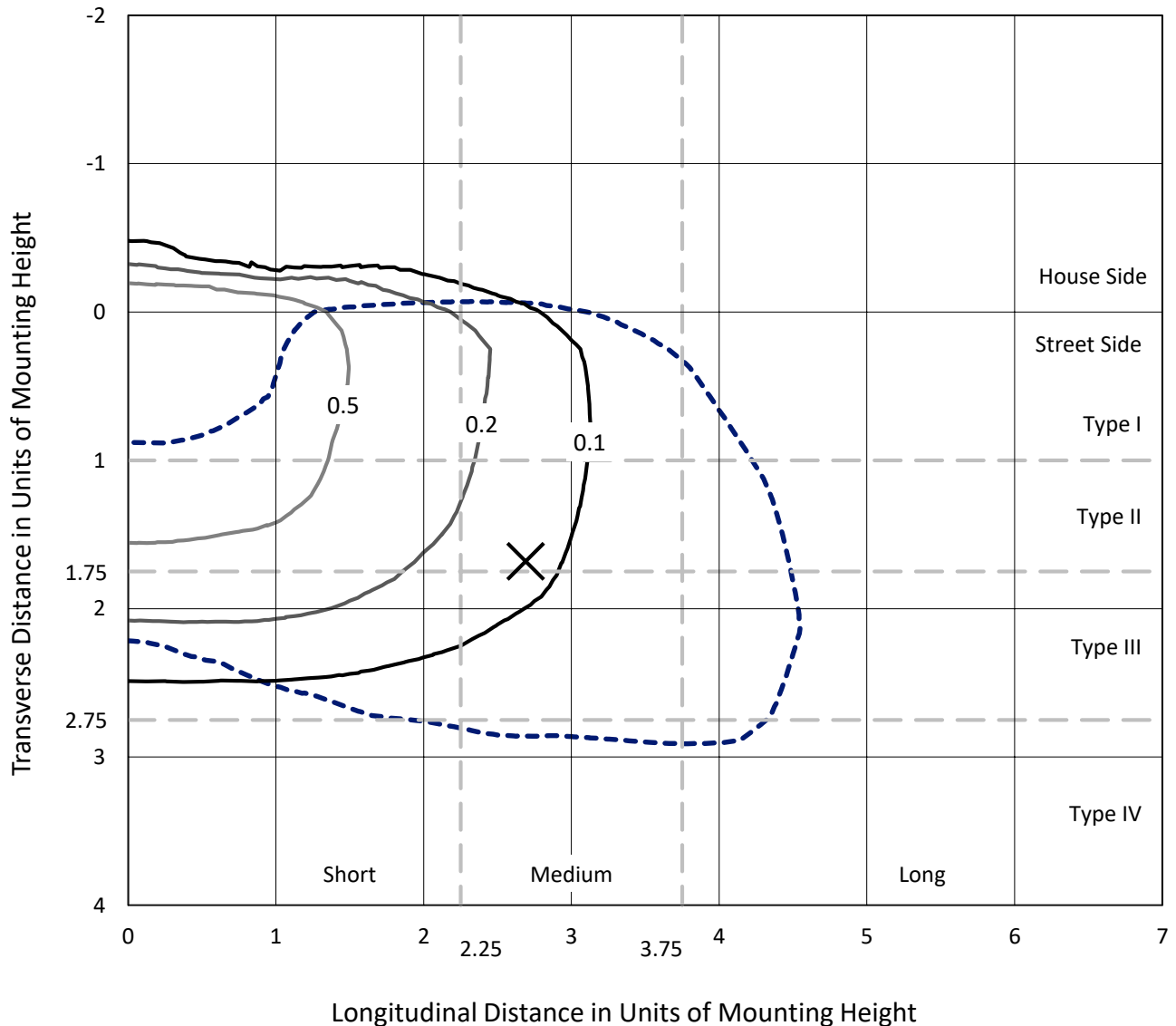
Input Watts (W): 54  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

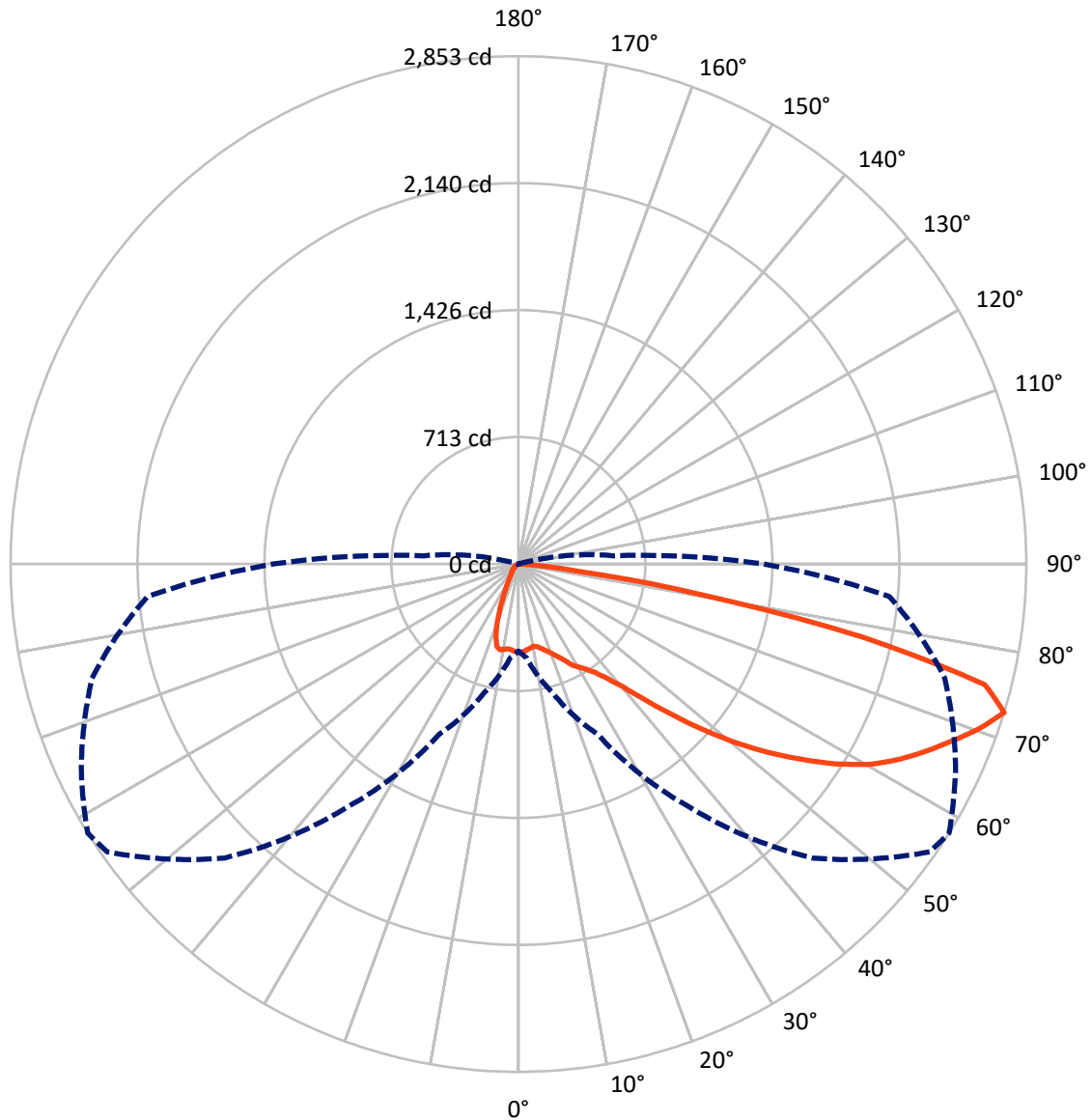


Based on 25 foot mounting height. Maximum calculated value = 1 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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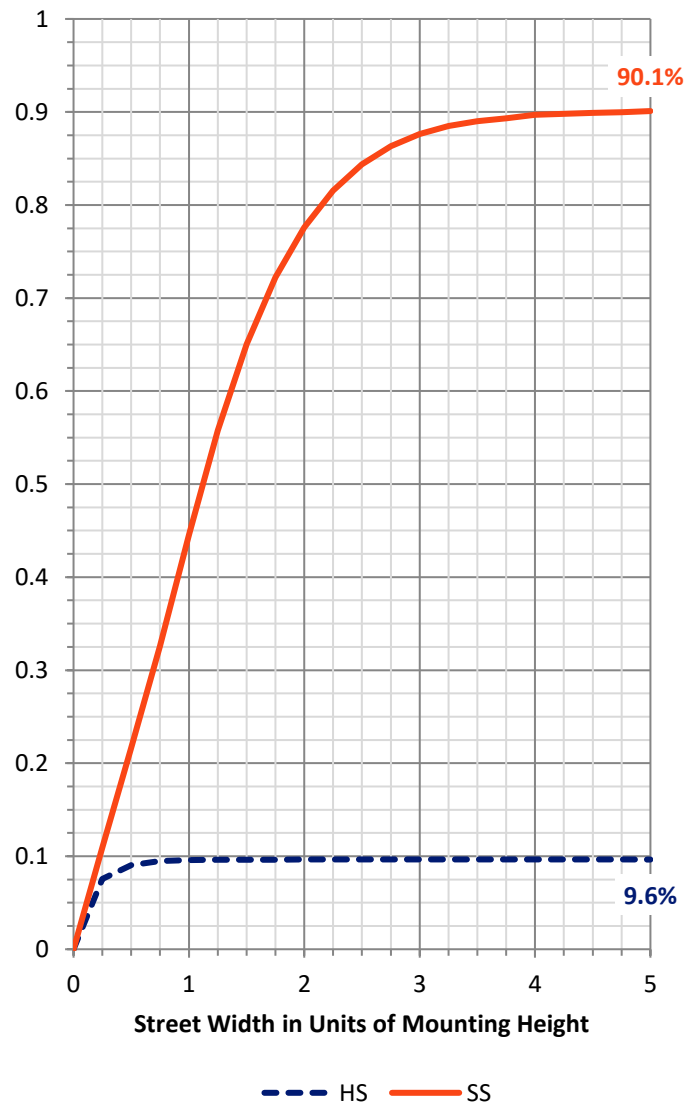
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	403.4	0.0	403.4
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	3744.6	0.0	3744.6
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	4148.0	0.0	4148.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.7	1.1
10°-20°	119.0	2.9
20°-30°	186.9	4.5
30°-40°	322.3	7.8
40°-50°	613.3	14.8
50°-60°	971.2	23.4
60°-70°	1133.3	27.3
70°-80°	709.8	17.1
80°-90°	46.6	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°	4148.0	100.0
0°-180°	4148.0	100.0

**Coefficient of Utilization**



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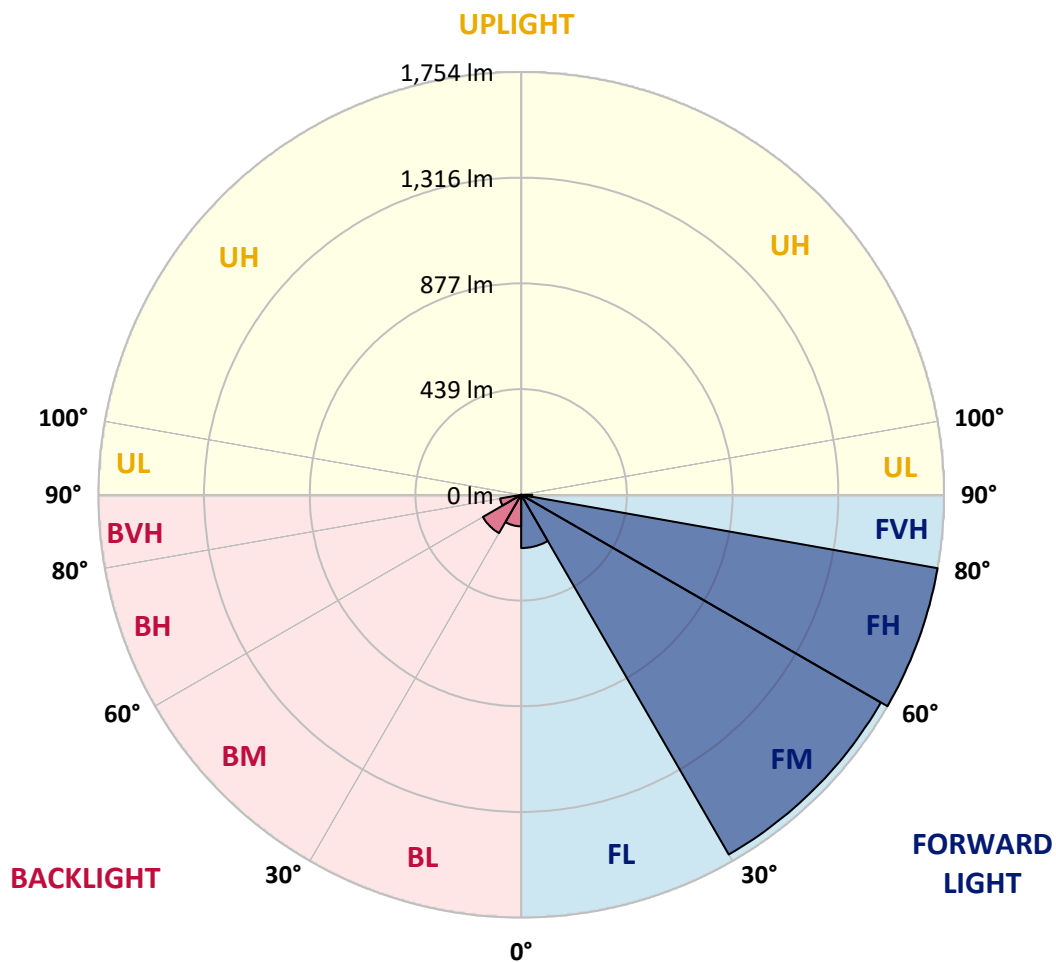
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	220.9	5.3			
FM	(30°-60°)	1723.3	41.5			
FH	(60°-80°)	1754.3	42.3			G1/1800
FVH	(80°-90°)	46.1	1.1			G1/100
BL	(0°-30°)	130.6	3.1	B1/500		
BM	(30°-60°)	183.5	4.4	B0/220		
BH	(60°-80°)	88.7	2.1	B0/110		G0/110
BVH	(80°-90°)	0.4	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 IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	497.7	497.7	497.7	497.7	497.7	497.7	497.7	497.7	497.7	497.7	497.7
2.5°	495.5	493.3	492.5	491.8	492.5	493.3	491.1	493.3	491.8	492.5	494.0
5°	477.7	475.5	474.7	475.5	477.7	481.4	482.9	485.1	485.1	487.3	488.1
7.5°	457.7	456.2	455.5	456.9	461.4	469.5	474.0	477.0	479.9	484.4	488.8
10°	446.6	445.8	445.1	447.3	451.7	459.2	465.1	469.5	480.7	493.3	501.4
12.5°	439.1	439.1	440.6	445.1	451.0	456.9	471.0	477.0	494.0	513.3	524.4
15°	433.2	433.2	435.4	443.6	451.7	465.8	486.6	493.3	513.3	537.0	551.9
17.5°	428.7	430.2	431.7	439.9	455.5	479.2	503.7	513.3	537.8	563.8	580.1
20°	429.5	431.0	431.7	439.9	462.1	494.8	525.9	537.0	565.2	592.7	609.0
22.5°	433.9	436.2	436.9	448.0	474.0	511.1	551.1	563.8	594.2	623.1	635.7
25°	452.5	454.0	449.5	459.2	491.1	536.3	583.8	597.1	627.5	654.3	664.6
27.5°	515.5	517.0	492.5	481.4	504.4	557.1	623.8	642.4	680.2	698.0	699.5
30°	652.0	653.5	605.3	552.6	536.3	574.9	646.1	672.1	721.0	741.0	732.1
32.5°	827.8	826.3	760.3	682.4	612.0	606.0	678.0	705.4	758.8	778.1	771.5
35°	1004.4	1006.6	950.2	833.0	732.1	664.6	718.8	750.7	815.2	842.7	830.8
37.5°	1125.3	1140.1	1115.6	988.8	879.8	772.9	784.8	818.9	899.8	936.9	911.6
40°	1295.9	1292.2	1232.8	1139.4	1042.9	933.2	891.6	907.9	1000.7	1050.4	1011.0
42.5°	1525.1	1517.7	1416.8	1325.6	1218.0	1128.2	1043.7	1040.7	1116.4	1174.2	1117.1
45°	1732.8	1721.7	1652.7	1564.4	1446.5	1343.4	1229.1	1203.2	1255.8	1304.8	1238.0
47.5°	1898.2	1879.7	1830.7	1784.0	1755.1	1594.8	1423.5	1384.2	1410.9	1447.2	1353.0
50°	2094.0	2042.9	1971.7	1943.5	2003.5	1879.7	1610.4	1572.6	1571.1	1591.9	1471.7
52.5°	2183.1	2090.3	2050.3	2074.0	2180.1	2144.5	1812.2	1758.0	1736.5	1738.7	1582.2
55°	2075.5	2065.1	2086.6	2160.8	2299.5	2278.7	2005.8	1939.0	1907.1	1867.1	1688.3
57.5°	1953.1	1985.0	2070.3	2212.0	2450.8	2418.9	2196.4	2120.8	2062.1	1970.2	1806.2
60°	1840.4	1873.0	2013.9	2223.9	2533.9	2554.0	2355.2	2283.2	2196.4	2075.5	1936.0
62.5°	1669.0	1694.2	1892.3	2206.8	2497.6	2632.6	2465.7	2411.5	2330.7	2175.6	2085.1
65°	1476.1	1492.5	1688.3	2070.3	2426.4	2623.7	2556.9	2526.5	2447.9	2280.2	2232.8
67.5°	1264.7	1284.0	1447.2	1824.8	2286.9	2582.1	2643.0	2640.0	2550.2	2396.0	2339.6
70°	1021.4	1022.9	1157.9	1513.2	2043.6	2499.1	2749.8	2756.5	2648.2	2482.7	2344.0
72.5°	488.8	528.9	750.7	1056.3	1660.8	2335.9	2819.5	2852.9	2709.7	2479.8	2091.1
75°	112.0	115.7	218.8	502.2	974.0	1792.9	2645.2	2707.5	2559.9	2144.5	1473.2
77.5°	40.8	43.0	61.6	146.9	374.6	926.5	1893.0	1984.3	1892.3	1386.4	696.5
80°	27.4	26.7	31.9	65.3	172.1	262.6	968.0	1022.2	933.2	473.3	166.9
82.5°	14.1	14.8	22.3	36.3	115.7	91.2	323.4	351.6	289.3	94.9	31.2
85°	6.7	6.7	12.6	23.0	49.0	31.9	72.0	86.8	77.9	41.5	10.4
87.5°	6.7	6.7	11.9	14.8	25.2	13.4	17.8	22.3	20.8	22.3	3.7
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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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	497.7	497.7	497.7	497.7	497.7	497.7	497.7	497.7	497.7	497.7	497.7
2.5°	494.0	493.3	492.5	494.0	493.3	494.8	494.8	496.3	496.3	494.8	494.0
5°	487.3	485.9	484.4	484.4	483.6	485.1	489.6	493.3	494.0	491.8	491.1
7.5°	488.1	488.1	486.6	483.6	478.4	478.4	478.4	482.9	485.1	483.6	482.9
10°	501.4	502.2	498.5	491.8	482.9	474.7	459.2	436.2	414.7	408.7	406.5
12.5°	524.4	525.2	517.8	505.9	487.3	439.1	379.8	324.9	282.6	270.7	268.5
15°	551.9	552.6	539.3	520.0	463.6	351.6	263.3	201.0	163.9	155.0	154.3
17.5°	580.1	578.6	558.6	521.5	393.1	249.2	160.2	128.3	118.7	116.5	117.2
20°	607.5	603.1	575.6	494.0	302.6	163.2	117.2	109.8	107.6	106.1	106.1
22.5°	632.7	623.8	589.7	439.9	212.1	117.2	104.6	103.1	100.1	97.9	97.2
25°	658.0	645.3	598.6	369.4	142.4	102.4	98.7	95.7	92.0	89.0	88.3
27.5°	688.4	670.6	594.2	280.4	106.8	94.9	92.0	87.5	82.3	77.9	76.4
30°	717.3	697.3	568.9	193.6	91.2	87.5	83.1	76.4	69.7	64.5	63.1
32.5°	753.6	730.7	523.7	126.8	79.4	76.4	72.0	63.8	54.9	49.0	47.5
35°	805.6	779.6	465.8	89.0	69.7	64.5	58.6	49.7	40.1	35.6	34.9
37.5°	878.3	843.4	393.1	72.0	61.6	54.1	45.2	36.3	29.7	26.0	25.2
40°	967.3	913.9	312.3	63.8	54.9	45.2	34.1	26.0	21.5	18.5	18.5
42.5°	1063.7	979.9	230.0	58.6	48.2	37.1	25.2	18.5	15.6	14.1	13.4
45°	1163.1	1038.5	155.0	54.1	42.3	28.2	17.8	12.6	10.4	10.4	9.6
47.5°	1266.2	1077.8	100.1	49.0	35.6	20.8	11.9	8.9	7.4	7.4	7.4
50°	1368.6	1098.6	71.2	44.5	28.9	14.1	8.9	6.7	5.9	5.9	5.9
52.5°	1442.8	1085.2	57.1	38.6	22.3	10.4	6.7	5.2	4.5	4.5	4.5
55°	1507.3	1062.2	49.7	33.4	16.3	7.4	5.2	4.5	3.7	3.7	3.7
57.5°	1573.3	1032.6	44.5	28.2	11.9	5.2	3.7	3.0	3.0	3.0	3.0
60°	1633.4	982.1	38.6	22.3	8.2	3.7	3.0	2.2	2.2	2.2	2.2
62.5°	1692.0	939.1	33.4	17.1	5.9	3.0	1.5	1.5	0.7	0.7	0.7
65°	1725.4	881.2	26.7	11.1	3.7	2.2	0.7	0.7	0.0	0.0	0.0
67.5°	1715.0	812.2	18.5	6.7	2.2	1.5	0.7	0.0	0.0	0.0	0.0
70°	1643.0	719.5	11.1	3.7	2.2	1.5	0.7	0.0	0.0	0.0	0.0
72.5°	1376.0	532.6	6.7	3.0	1.5	0.7	0.0	0.0	0.0	0.0	0.0
75°	919.1	244.8	3.7	2.2	0.7	0.7	0.0	0.0	0.0	0.0	0.0
77.5°	420.6	73.4	2.2	1.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0
80°	84.6	19.3	1.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	17.8	3.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	3.7	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.5	0.7	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)