

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: P573130

Luminaire Tested: **ARCH-S-PA2-40-727-U-T2R-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573130  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-40-727-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 420mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

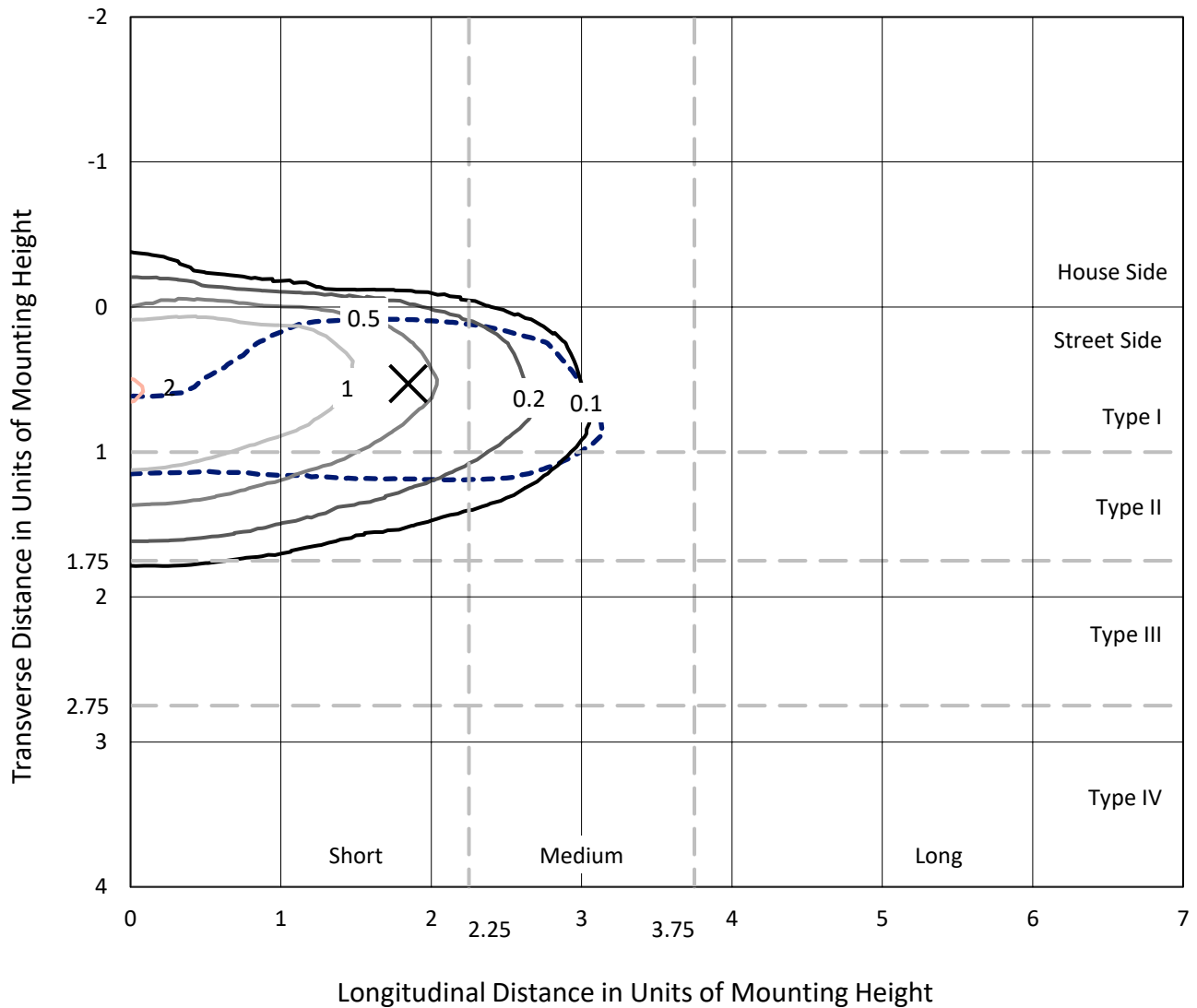
Lumens per Lamp: N/A  
Luminaire Lumens: 4310 lumens  
Efficiency: N/A  
Efficacy: 99.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G1  
  
Input Watts (W): 43.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
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: P573130  
 CATALOG NUMBER: ARCH-S-PA2-40-727-U-T2R-HSS

### Iso-Footcandle Lines of Horizontal Illumination

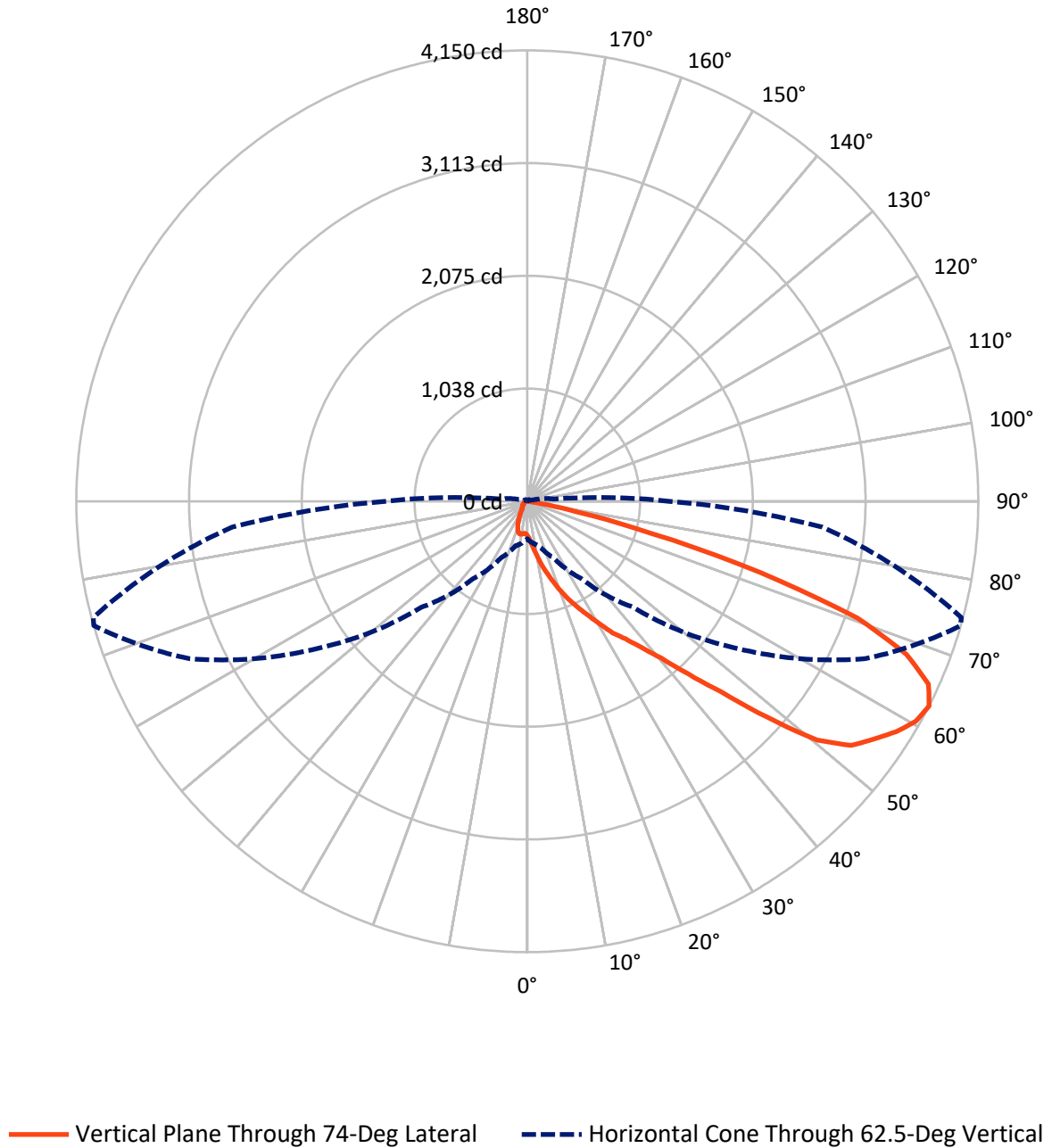
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc  
 Type II - Short - N/A

REPORT NUMBER: P573130  
CATALOG NUMBER: ARCH-S-PA2-40-727-U-T2R-HSS

### Luminous Intensity Polar Plot



REPORT NUMBER: P573130  
 CATALOG NUMBER: ARCH-S-PA2-40-727-U-T2R-HSS

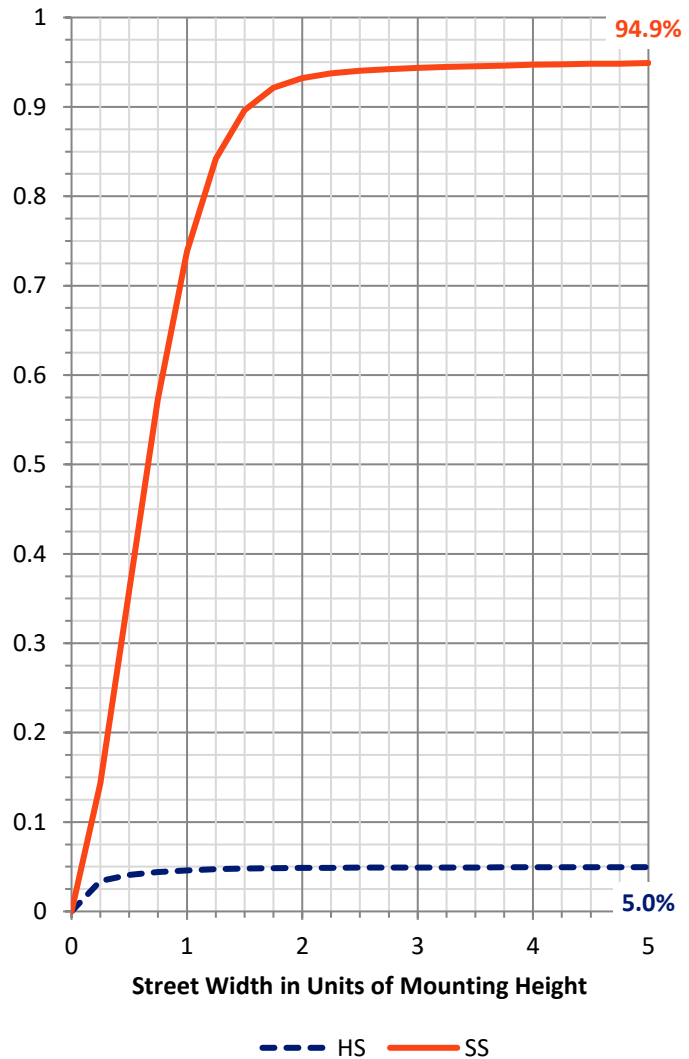
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	215.0	0.0	215.0
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	4095.0	0.0	4095.0
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	4310.0	0.0	4310.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	39.5	0.9
10°-20°	165.7	3.8
20°-30°	355.7	8.3
30°-40°	623.8	14.5
40°-50°	967.1	22.4
50°-60°	1114.9	25.9
60°-70°	783.2	18.2
70°-80°	244.0	5.7
80°-90°	16.1	0.4
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°	4310.0	100.0
0°-180°	4310.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P573130

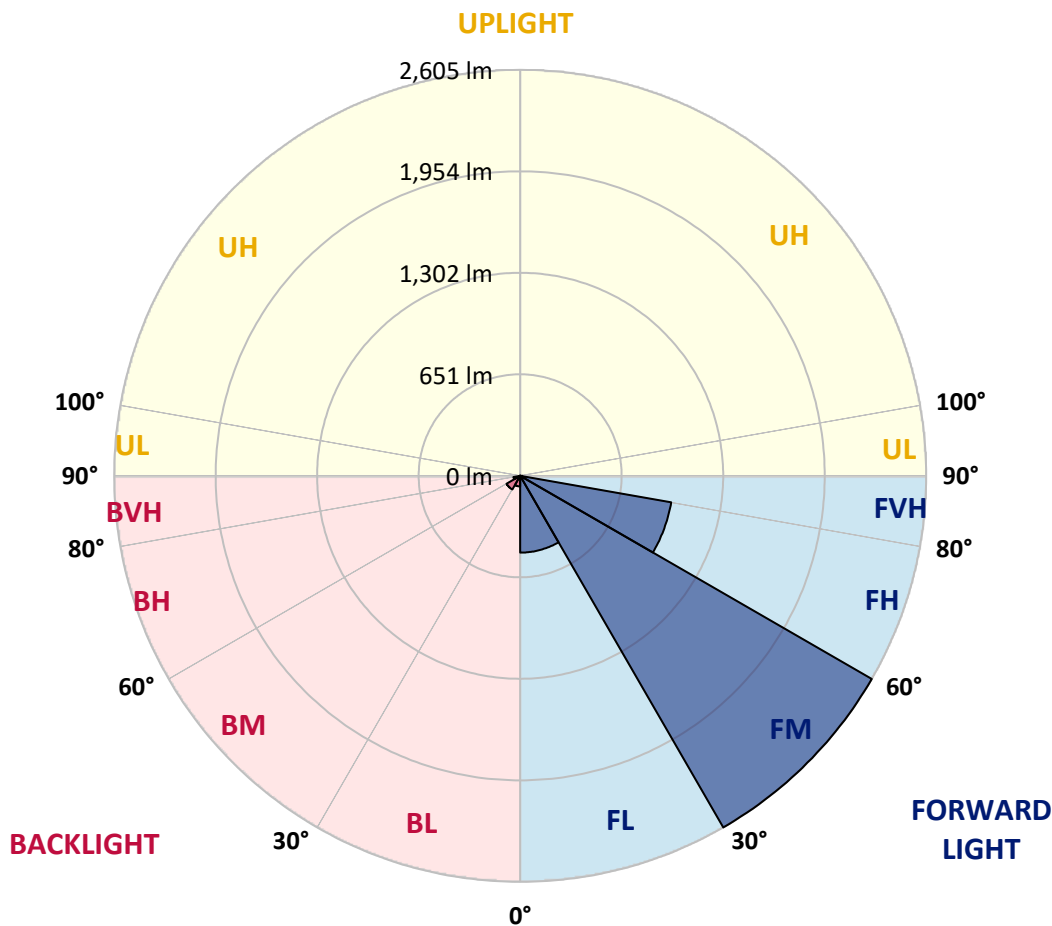
CATALOG NUMBER: ARCH-S-PA2-40-727-U-T2R-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	492.7	11.4			
FM (30°-60°)	2604.7	60.4			
FH (60°-80°)	983.7	22.8			G1/1800
FVH (80°-90°)	13.9	0.3			G1/100
BL (0°-30°)	68.2	1.6	B0/110		
BM (30°-60°)	101.0	2.3	B0/220		
BH (60°-80°)	43.5	1.0	B0/110		G0/110
BVH (80°-90°)	2.2	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**

Type II Short





REPORT NUMBER: P573130

CATALOG NUMBER: ARCH-S-PA2-40-727-U-T2R-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	315.5	315.5	315.5	315.5	315.5	315.5	315.5	315.5	315.5	315.5	315.5
2.5°	438.4	430.8	421.7	414.1	398.9	388.3	374.7	359.5	342.8	341.3	327.6
5°	614.3	591.6	591.6	571.9	549.1	508.1	470.2	423.2	388.3	385.3	348.9
7.5°	794.8	776.6	766.0	735.7	699.3	653.8	593.1	514.2	450.5	439.9	380.7
10°	963.2	949.5	929.8	905.6	873.7	799.4	723.5	620.4	518.8	511.2	418.7
12.5°	1093.7	1077.0	1067.9	1057.2	1016.3	957.1	858.5	728.1	606.7	590.1	456.6
15°	1192.2	1184.7	1175.6	1175.6	1154.3	1096.7	995.1	843.4	691.7	672.0	505.1
17.5°	1271.1	1262.0	1260.5	1269.6	1263.5	1222.6	1127.0	954.1	779.7	764.5	555.2
20°	1359.1	1347.0	1347.0	1354.5	1353.0	1330.3	1246.9	1081.5	882.8	855.5	612.8
22.5°	1483.5	1475.9	1469.8	1457.7	1448.6	1427.4	1354.5	1205.9	981.4	955.6	672.0
25°	1650.3	1641.2	1613.9	1592.7	1553.3	1521.4	1459.2	1316.6	1081.5	1052.7	729.6
27.5°	1812.6	1794.4	1768.6	1741.3	1697.4	1642.8	1565.4	1421.3	1186.2	1155.8	788.8
30°	1984.0	1970.4	1938.5	1894.5	1839.9	1779.3	1686.7	1547.2	1306.0	1272.6	852.5
32.5°	2120.6	2099.3	2070.5	2028.0	1971.9	1929.4	1829.3	1685.2	1444.0	1400.1	919.2
35°	2229.8	2213.1	2175.2	2134.2	2091.7	2079.6	1970.4	1797.5	1554.8	1513.8	990.5
37.5°	2299.5	2282.9	2251.0	2210.1	2193.4	2214.6	2143.3	1950.7	1703.4	1651.9	1072.4
40°	2354.2	2334.4	2308.6	2290.4	2284.4	2343.5	2336.0	2149.4	1899.1	1868.8	1184.7
42.5°	2393.6	2373.9	2357.2	2355.7	2395.1	2510.4	2595.3	2427.0	2172.1	2109.9	1328.8
45°	2343.5	2326.9	2336.0	2389.0	2484.6	2666.6	2909.3	2819.8	2501.3	2457.3	1559.3
47.5°	2204.0	2193.4	2234.3	2331.4	2508.9	2762.2	3212.7	3250.6	2971.5	2904.8	1858.1
50°	1985.6	1984.0	2049.3	2181.2	2433.0	2798.6	3365.9	3664.7	3453.9	3385.6	2100.8
52.5°	1689.8	1683.7	1779.3	1962.8	2254.0	2730.3	3394.7	3830.1	3733.0	3652.6	2254.0
55°	1354.5	1340.9	1454.7	1656.4	1990.1	2531.6	3317.4	3866.5	3866.5	3793.6	2367.8
57.5°	952.6	973.8	1067.9	1310.6	1664.0	2234.3	3126.2	3833.1	4001.5	3939.3	2521.0
60°	600.7	609.8	712.9	908.6	1262.0	1836.9	2784.9	3689.0	4109.2	4072.7	2643.9
62.5°	345.8	374.7	426.2	574.9	870.7	1380.3	2363.3	3429.6	4150.1	4134.9	2724.3
65°	210.8	213.9	238.1	324.6	535.4	942.0	1891.5	3068.6	4057.6	4071.2	2709.1
67.5°	157.8	157.8	165.3	204.8	304.9	599.2	1395.5	2630.2	3761.8	3805.8	2566.5
70°	136.5	136.5	138.0	150.2	188.1	354.9	922.2	2120.6	3224.8	3220.3	2120.6
72.5°	107.7	112.2	121.3	127.4	142.6	207.8	540.0	1482.0	2240.4	2293.5	1365.2
75°	86.5	88.0	100.1	110.7	119.8	141.1	254.8	823.7	1175.6	1175.6	600.7
77.5°	66.7	69.8	77.4	88.0	100.1	100.1	106.2	318.5	455.1	439.9	177.5
80°	42.5	44.0	56.1	69.8	83.4	71.3	57.6	106.2	124.4	119.8	48.5
82.5°	25.8	27.3	36.4	56.1	56.1	39.4	36.4	44.0	39.4	36.4	19.7
85°	7.6	9.1	25.8	36.4	31.9	15.2	18.2	19.7	18.2	16.7	10.6
87.5°	1.5	1.5	7.6	9.1	7.6	7.6	6.1	7.6	7.6	7.6	4.6
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: P573130

CATALOG NUMBER: ARCH-S-PA2-40-727-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	315.5	315.5	315.5	315.5	315.5	315.5	315.5	315.5	315.5	315.5	315.5
2.5°	320.1	314.0	301.9	292.8	285.2	277.6	271.5	270.0	267.0	267.0	265.4
5°	333.7	320.1	297.3	282.1	270.0	259.4	250.3	241.2	238.1	235.1	236.6
7.5°	354.9	333.7	301.9	279.1	257.9	233.6	213.9	197.2	185.1	182.0	177.5
10°	382.2	350.4	309.4	273.0	233.6	191.1	163.8	147.1	141.1	133.5	135.0
12.5°	409.6	370.1	315.5	256.3	192.6	150.2	127.4	116.8	112.2	110.7	112.2
15°	441.4	391.3	312.5	226.0	154.7	121.3	107.7	103.1	100.1	100.1	98.6
17.5°	473.3	409.6	301.9	186.6	124.4	103.1	97.1	92.5	89.5	88.0	88.0
20°	508.1	426.2	277.6	148.7	103.1	94.0	88.0	81.9	78.9	78.9	78.9
22.5°	544.5	438.4	245.7	118.3	92.5	83.4	77.4	72.8	69.8	69.8	69.8
25°	576.4	444.4	207.8	98.6	84.9	75.8	69.8	65.2	63.7	62.2	62.2
27.5°	606.7	442.9	168.4	86.5	75.8	68.3	62.2	59.2	56.1	56.1	56.1
30°	637.1	433.8	133.5	78.9	69.8	60.7	56.1	53.1	51.6	50.1	50.1
32.5°	662.9	418.7	104.7	72.8	63.7	54.6	50.1	47.0	47.0	45.5	45.5
35°	688.7	395.9	88.0	68.3	57.6	50.1	45.5	44.0	42.5	42.5	42.5
37.5°	716.0	367.1	77.4	62.2	51.6	45.5	42.5	41.0	39.4	37.9	37.9
40°	749.3	338.3	72.8	57.6	47.0	41.0	37.9	36.4	34.9	34.9	34.9
42.5°	802.4	314.0	68.3	51.6	42.5	37.9	34.9	31.9	31.9	30.3	30.3
45°	902.5	304.9	63.7	47.0	39.4	33.4	31.9	28.8	27.3	27.3	27.3
47.5°	1033.0	306.4	59.2	42.5	36.4	30.3	28.8	27.3	24.3	24.3	24.3
50°	1140.7	298.8	54.6	39.4	31.9	28.8	25.8	24.3	22.8	22.8	22.8
52.5°	1183.1	285.2	50.1	36.4	30.3	25.8	24.3	22.8	21.2	21.2	21.2
55°	1225.6	279.1	45.5	31.9	27.3	25.8	22.8	21.2	19.7	18.2	18.2
57.5°	1303.0	282.1	41.0	30.3	25.8	24.3	21.2	18.2	15.2	13.7	13.7
60°	1343.9	271.5	37.9	27.3	24.3	22.8	18.2	13.7	10.6	9.1	9.1
62.5°	1309.0	241.2	34.9	25.8	22.8	19.7	13.7	10.6	7.6	4.6	4.6
65°	1212.0	198.7	31.9	24.3	19.7	15.2	12.1	7.6	4.6	3.0	3.0
67.5°	1089.1	156.2	28.8	22.8	18.2	13.7	10.6	6.1	3.0	1.5	1.5
70°	879.8	112.2	27.3	21.2	16.7	12.1	9.1	6.1	3.0	1.5	1.5
72.5°	567.3	72.8	24.3	19.7	15.2	12.1	7.6	4.6	3.0	1.5	1.5
75°	262.4	48.5	22.8	18.2	15.2	10.6	7.6	6.1	3.0	1.5	1.5
77.5°	77.4	34.9	21.2	16.7	13.7	10.6	7.6	6.1	3.0	1.5	1.5
80°	31.9	24.3	16.7	15.2	13.7	10.6	7.6	6.1	3.0	1.5	1.5
82.5°	15.2	10.6	7.6	6.1	7.6	7.6	6.1	6.1	3.0	1.5	1.5
85°	7.6	4.6	3.0	3.0	3.0	1.5	1.5	3.0	3.0	1.5	1.5
87.5°	4.6	3.0	3.0	3.0	1.5	1.5	1.5	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)