

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: P573544

Luminaire Tested: **ARCH-S-PA2-90-730-U-T2R-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573544  
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-PA2-90-730-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 910mA 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: 8995 lumens  
Efficiency: N/A  
Efficacy: 97.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

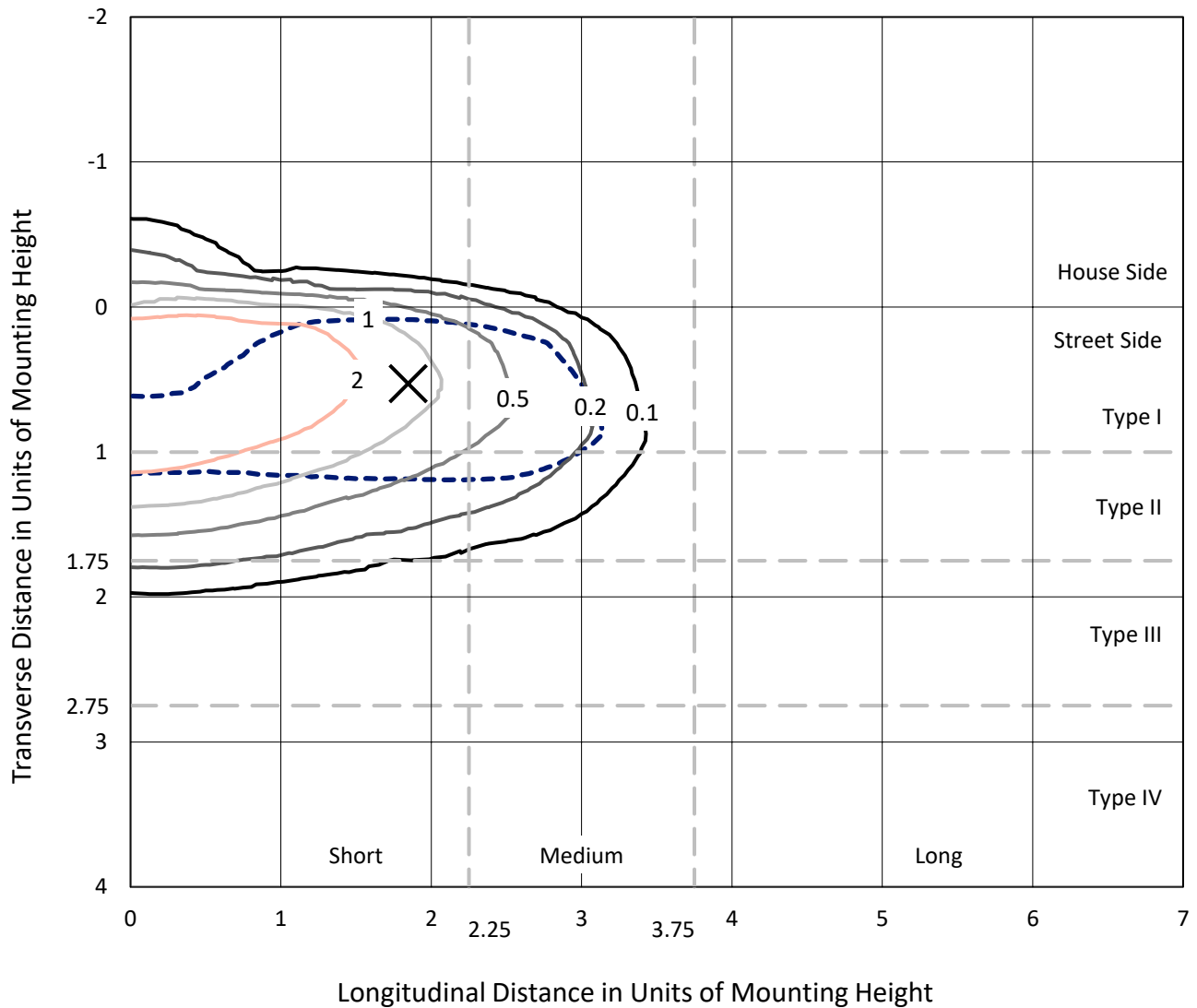
Input Watts (W): 92.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P573544  
 CATALOG NUMBER: ARCH-S-PA2-90-730-U-T2R-HSS

### Iso-Footcandle Lines of Horizontal Illumination

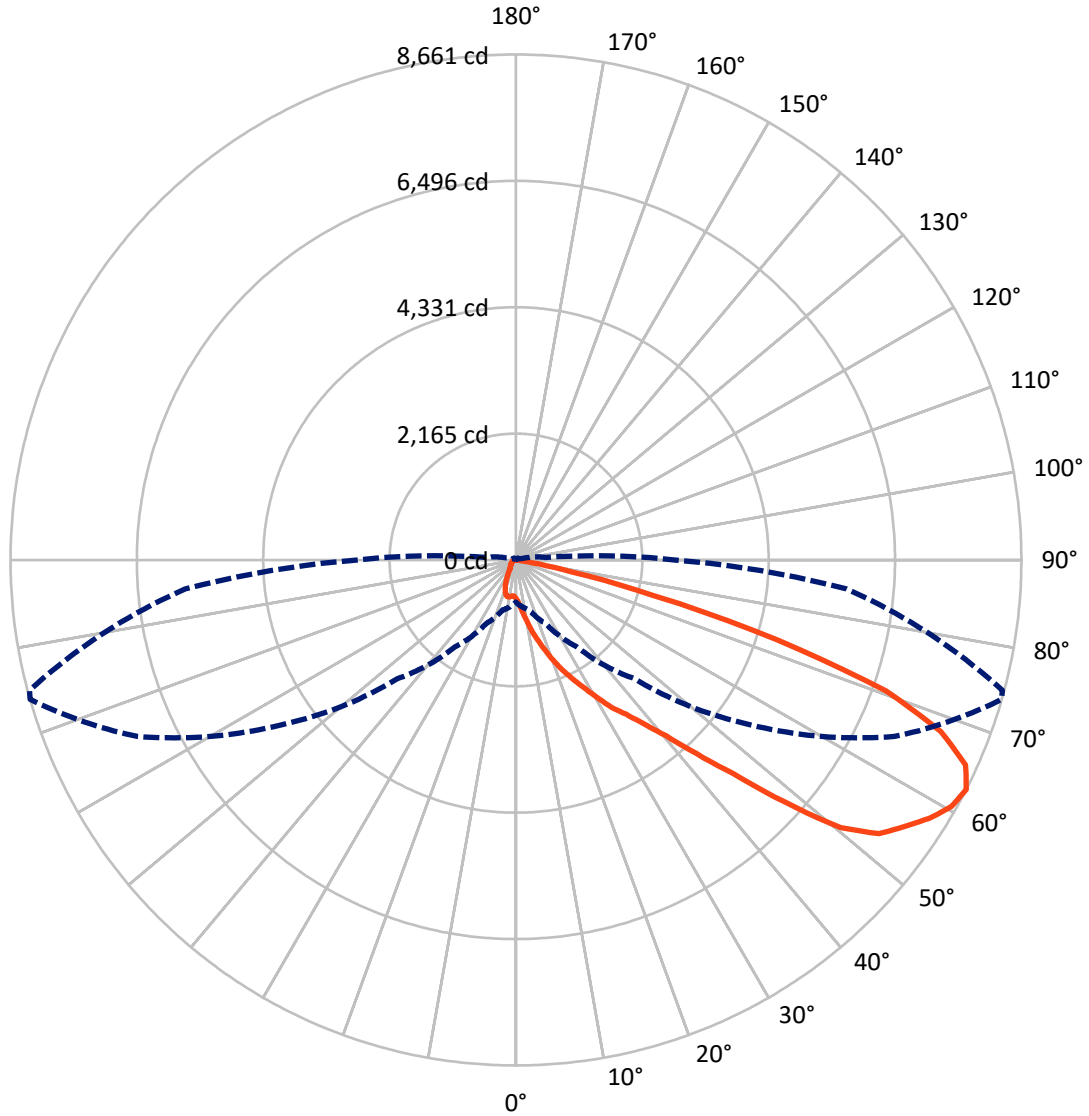
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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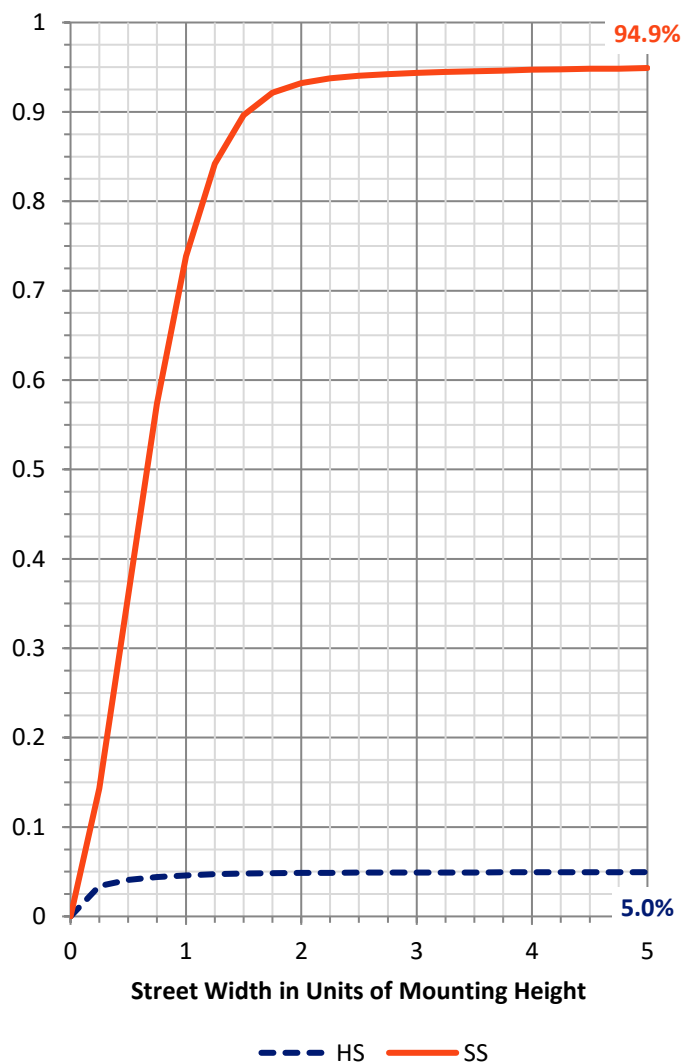
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	448.6	0.0	448.6
	% Fixture	5.0	0.0	5.0
<b>Street Side</b>	Lumens	8546.4	0.0	8546.4
	% Fixture	95.0	0.0	95.0
<b>Total</b>	Lumens	8995.0	0.0	8995.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.3	0.9
10°-20°	345.9	3.8
20°-30°	742.3	8.3
30°-40°	1301.9	14.5
40°-50°	2018.3	22.4
50°-60°	2326.8	25.9
60°-70°	1634.6	18.2
70°-80°	509.3	5.7
80°-90°	33.7	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°	8995.0	100.0
0°-180°	8995.0	100.0

**Coefficient of Utilization**



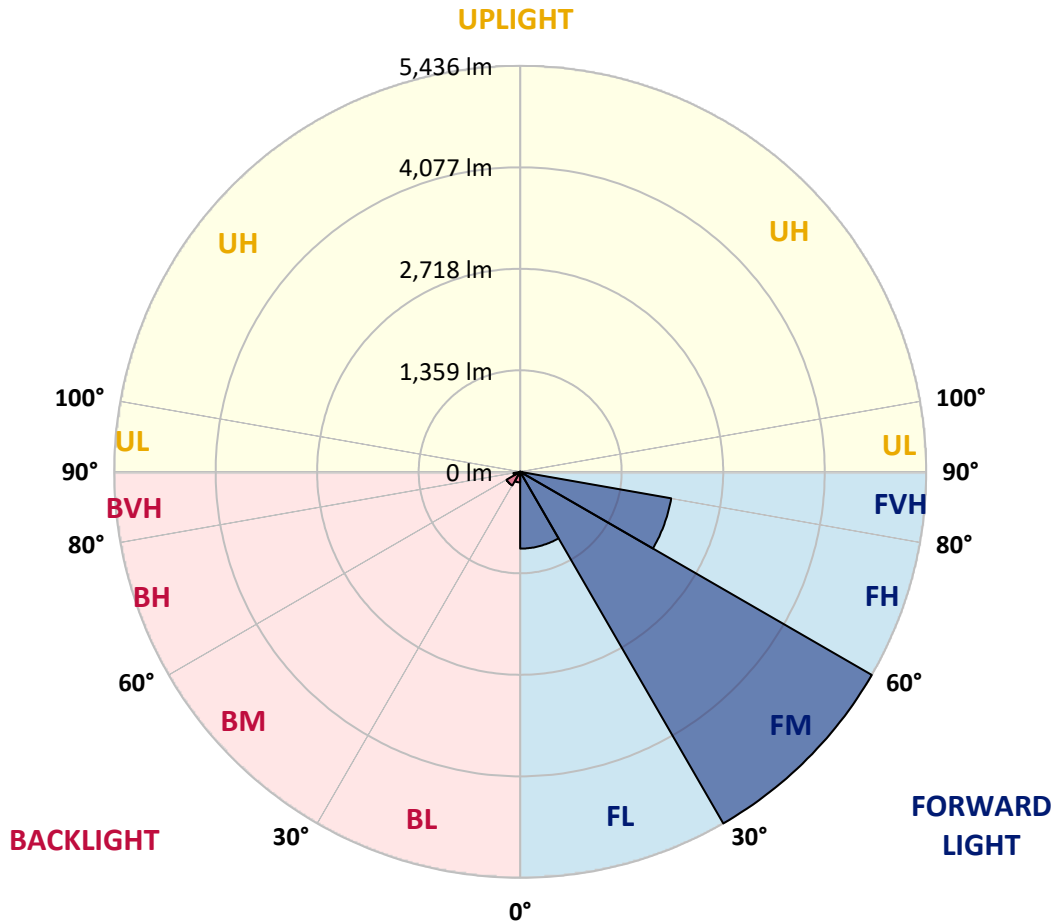
REPORT NUMBER: P573544  
 CATALOG NUMBER: ARCH-S-PA2-90-730-U-T2R-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1028.2	11.4			
FM (30°-60°)	5436.1	60.4			
FH (60°-80°)	2053.1	22.8			G2/5000
FVH (80°-90°)	29.0	0.3			G1/100
BL (0°-30°)	142.4	1.6	B1/500		
BM (30°-60°)	210.8	2.3	B0/220		
BH (60°-80°)	90.8	1.0	B0/110		G0/110
BVH (80°-90°)	4.6	0.1			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 II Short





REPORT NUMBER: P573544

CATALOG NUMBER: ARCH-S-PA2-90-730-U-T2R-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	658.5	658.5	658.5	658.5	658.5	658.5	658.5	658.5	658.5	658.5	658.5
2.5°	914.9	899.1	880.1	864.2	832.6	810.4	781.9	750.3	715.4	712.3	683.8
5°	1282.1	1234.6	1234.6	1193.5	1146.0	1060.5	981.4	883.2	810.4	804.1	728.1
7.5°	1658.8	1620.8	1598.7	1535.4	1459.4	1364.4	1237.8	1073.2	940.2	918.0	794.6
10°	2010.2	1981.7	1940.6	1889.9	1823.4	1668.3	1510.0	1294.8	1082.7	1066.8	873.7
12.5°	2282.5	2247.6	2228.6	2206.5	2121.0	1997.5	1791.8	1519.5	1266.3	1231.4	952.9
15°	2488.2	2472.4	2453.4	2453.4	2409.1	2288.8	2076.7	1760.1	1443.6	1402.4	1054.2
17.5°	2652.8	2633.8	2630.7	2649.7	2637.0	2551.5	2352.1	1991.2	1627.2	1595.5	1158.6
20°	2836.4	2811.1	2811.1	2827.0	2823.8	2776.3	2602.2	2257.1	1842.4	1785.4	1278.9
22.5°	3096.0	3080.2	3067.5	3042.2	3023.2	2978.9	2827.0	2516.7	2048.2	1994.4	1402.4
25°	3444.3	3425.3	3368.3	3324.0	3241.7	3175.2	3045.4	2747.8	2257.1	2197.0	1522.7
27.5°	3783.0	3745.0	3691.2	3634.2	3542.4	3428.4	3267.0	2966.2	2475.6	2412.2	1646.2
30°	4140.7	4112.2	4045.7	3953.9	3840.0	3713.3	3520.2	3229.0	2725.7	2656.0	1779.1
32.5°	4425.6	4381.3	4321.2	4232.5	4115.4	4026.7	3817.8	3517.1	3013.7	2921.9	1918.4
35°	4653.6	4618.7	4539.6	4454.1	4365.5	4340.1	4112.2	3751.3	3244.8	3159.3	2067.2
37.5°	4799.2	4764.3	4697.9	4612.4	4577.6	4621.9	4473.1	4071.1	3555.1	3447.4	2238.1
40°	4913.1	4872.0	4818.2	4780.2	4767.5	4891.0	4875.1	4485.8	3963.4	3900.1	2472.4
42.5°	4995.4	4954.3	4919.5	4916.3	4998.6	5239.2	5416.5	5065.1	4533.3	4403.5	2773.1
45°	4891.0	4856.2	4875.1	4985.9	5185.4	5565.3	6071.8	5885.0	5220.2	5128.4	3254.3
47.5°	4599.7	4577.6	4663.0	4865.7	5236.0	5764.7	6704.9	6784.1	6201.6	6062.3	3878.0
50°	4143.9	4140.7	4276.8	4552.2	5077.8	5840.7	7024.6	7648.3	7208.3	7065.8	4384.5
52.5°	3526.6	3513.9	3713.3	4096.4	4704.2	5698.2	7084.8	7993.3	7790.7	7623.0	4704.2
55°	2827.0	2798.5	3035.9	3456.9	4153.4	5283.5	6923.3	8069.3	8069.3	7917.4	4941.6
57.5°	1988.0	2032.4	2228.6	2735.1	3472.8	4663.0	6524.5	7999.7	8351.1	8221.3	5261.4
60°	1253.6	1272.6	1487.9	1896.2	2633.8	3833.6	5812.2	7698.9	8575.8	8499.9	5517.8
62.5°	721.8	781.9	889.6	1199.8	1817.1	2880.8	4932.1	7157.6	8661.3	8629.6	5685.6
65°	440.0	446.4	497.0	677.5	1117.5	1965.9	3947.6	6404.2	8468.2	8496.7	5653.9
67.5°	329.2	329.2	345.1	427.4	636.3	1250.4	2912.4	5489.3	7850.9	7942.7	5356.3
70°	284.9	284.9	288.1	313.4	392.5	740.8	1924.7	4425.6	6730.2	6720.7	4425.6
72.5°	224.8	234.3	253.3	265.9	297.6	433.7	1127.0	3092.9	4675.7	4786.5	2849.1
75°	180.4	183.6	208.9	231.1	250.1	294.4	531.8	1719.0	2453.4	2453.4	1253.6
77.5°	139.3	145.6	161.4	183.6	208.9	208.9	221.6	664.8	949.7	918.0	370.4
80°	88.6	91.8	117.1	145.6	174.1	148.8	120.3	221.6	259.6	250.1	101.3
82.5°	53.8	57.0	76.0	117.1	117.1	82.3	76.0	91.8	82.3	76.0	41.2
85°	15.8	19.0	53.8	76.0	66.5	31.7	38.0	41.2	38.0	34.8	22.2
87.5°	3.2	3.2	15.8	19.0	15.8	15.8	12.7	15.8	15.8	15.8	9.5
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: P573544

CATALOG NUMBER: ARCH-S-PA2-90-730-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	658.5	658.5	658.5	658.5	658.5	658.5	658.5	658.5	658.5	658.5	658.5
2.5°	668.0	655.3	630.0	611.0	595.1	579.3	566.7	563.5	557.2	557.2	554.0
5°	696.4	668.0	620.5	588.8	563.5	541.3	522.3	503.3	497.0	490.7	493.8
7.5°	740.8	696.4	630.0	582.5	538.2	487.5	446.4	411.5	386.2	379.9	370.4
10°	797.8	731.3	645.8	569.8	487.5	398.9	341.9	307.1	294.4	278.6	281.7
12.5°	854.7	772.4	658.5	535.0	402.0	313.4	265.9	243.8	234.3	231.1	234.3
15°	921.2	816.7	652.1	471.7	322.9	253.3	224.8	215.3	208.9	208.9	205.8
17.5°	987.7	854.7	630.0	389.4	259.6	215.3	202.6	193.1	186.8	183.6	183.6
20°	1060.5	889.6	579.3	310.2	215.3	196.3	183.6	170.9	164.6	164.6	164.6
22.5°	1136.5	914.9	512.8	246.9	193.1	174.1	161.4	152.0	145.6	145.6	145.6
25°	1203.0	927.5	433.7	205.8	177.3	158.3	145.6	136.1	133.0	129.8	129.8
27.5°	1266.3	924.4	351.4	180.4	158.3	142.5	129.8	123.5	117.1	117.1	117.1
30°	1329.6	905.4	278.6	164.6	145.6	126.6	117.1	110.8	107.6	104.5	104.5
32.5°	1383.4	873.7	218.4	152.0	133.0	114.0	104.5	98.1	98.1	95.0	95.0
35°	1437.2	826.2	183.6	142.5	120.3	104.5	95.0	91.8	88.6	88.6	88.6
37.5°	1494.2	766.1	161.4	129.8	107.6	95.0	88.6	85.5	82.3	79.1	79.1
40°	1563.8	705.9	152.0	120.3	98.1	85.5	79.1	76.0	72.8	72.8	72.8
42.5°	1674.6	655.3	142.5	107.6	88.6	79.1	72.8	66.5	66.5	63.3	63.3
45°	1883.6	636.3	133.0	98.1	82.3	69.6	66.5	60.1	57.0	57.0	57.0
47.5°	2155.8	639.5	123.5	88.6	76.0	63.3	60.1	57.0	50.7	50.7	50.7
50°	2380.6	623.6	114.0	82.3	66.5	60.1	53.8	50.7	47.5	47.5	47.5
52.5°	2469.2	595.1	104.5	76.0	63.3	53.8	50.7	47.5	44.3	44.3	44.3
55°	2557.9	582.5	95.0	66.5	57.0	53.8	47.5	44.3	41.2	38.0	38.0
57.5°	2719.3	588.8	85.5	63.3	53.8	50.7	44.3	38.0	31.7	28.5	28.5
60°	2804.8	566.7	79.1	57.0	50.7	47.5	38.0	28.5	22.2	19.0	19.0
62.5°	2732.0	503.3	72.8	53.8	47.5	41.2	28.5	22.2	15.8	9.5	9.5
65°	2529.4	414.7	66.5	50.7	41.2	31.7	25.3	15.8	9.5	6.3	6.3
67.5°	2273.0	326.1	60.1	47.5	38.0	28.5	22.2	12.7	6.3	3.2	3.2
70°	1836.1	234.3	57.0	44.3	34.8	25.3	19.0	12.7	6.3	3.2	3.2
72.5°	1184.0	152.0	50.7	41.2	31.7	25.3	15.8	9.5	6.3	3.2	3.2
75°	547.7	101.3	47.5	38.0	31.7	22.2	15.8	12.7	6.3	3.2	3.2
77.5°	161.4	72.8	44.3	34.8	28.5	22.2	15.8	12.7	6.3	3.2	3.2
80°	66.5	50.7	34.8	31.7	28.5	22.2	15.8	12.7	6.3	3.2	3.2
82.5°	31.7	22.2	15.8	12.7	15.8	15.8	12.7	12.7	6.3	3.2	3.2
85°	15.8	9.5	6.3	6.3	6.3	3.2	3.2	6.3	6.3	3.2	3.2
87.5°	9.5	6.3	6.3	6.3	3.2	3.2	3.2	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)