

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: P573454

Luminaire Tested: **ARCH-S-PA2-80-727-U-T2R-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573454
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-PA2-80-727-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 820mA 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: 7613 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

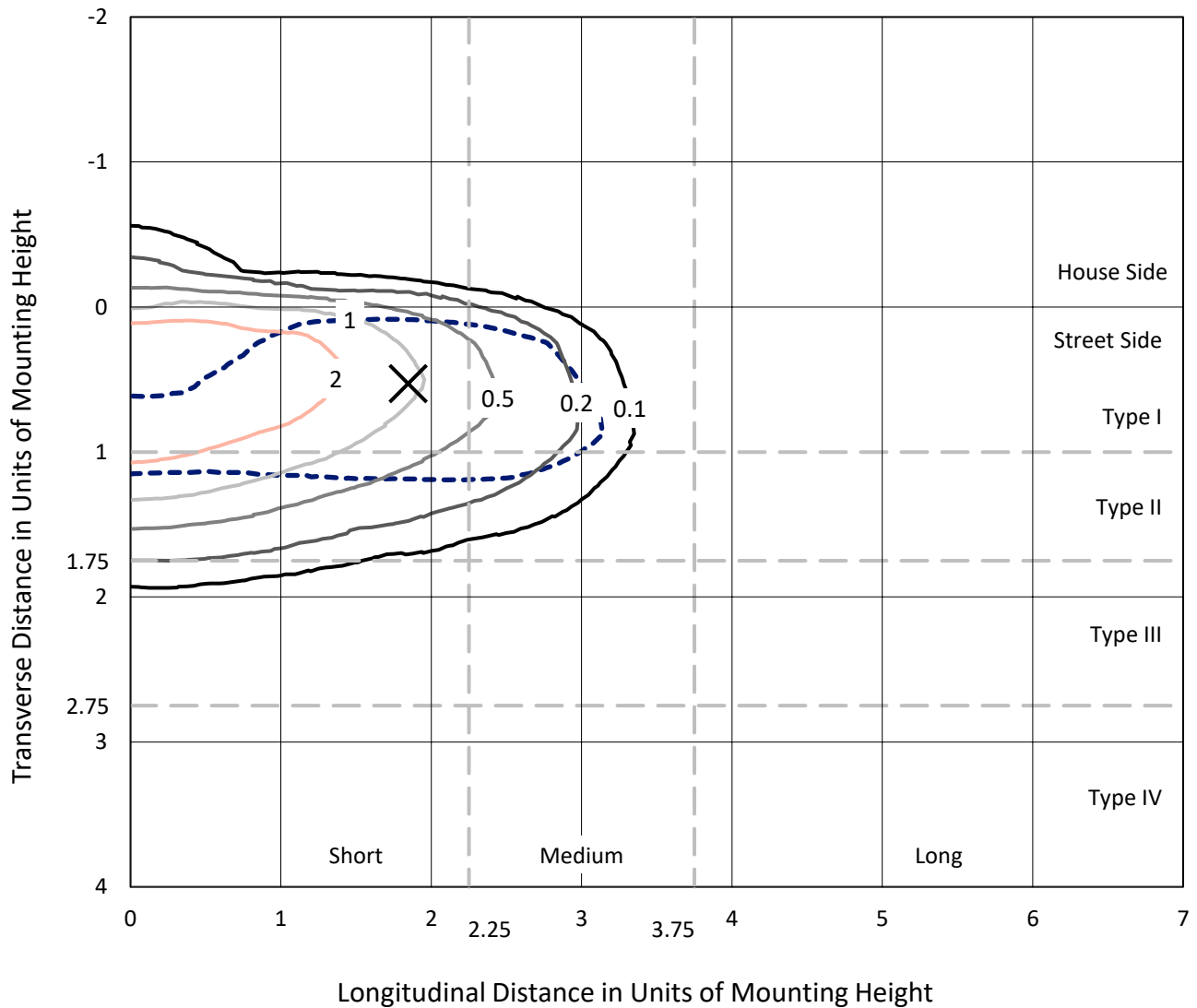
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

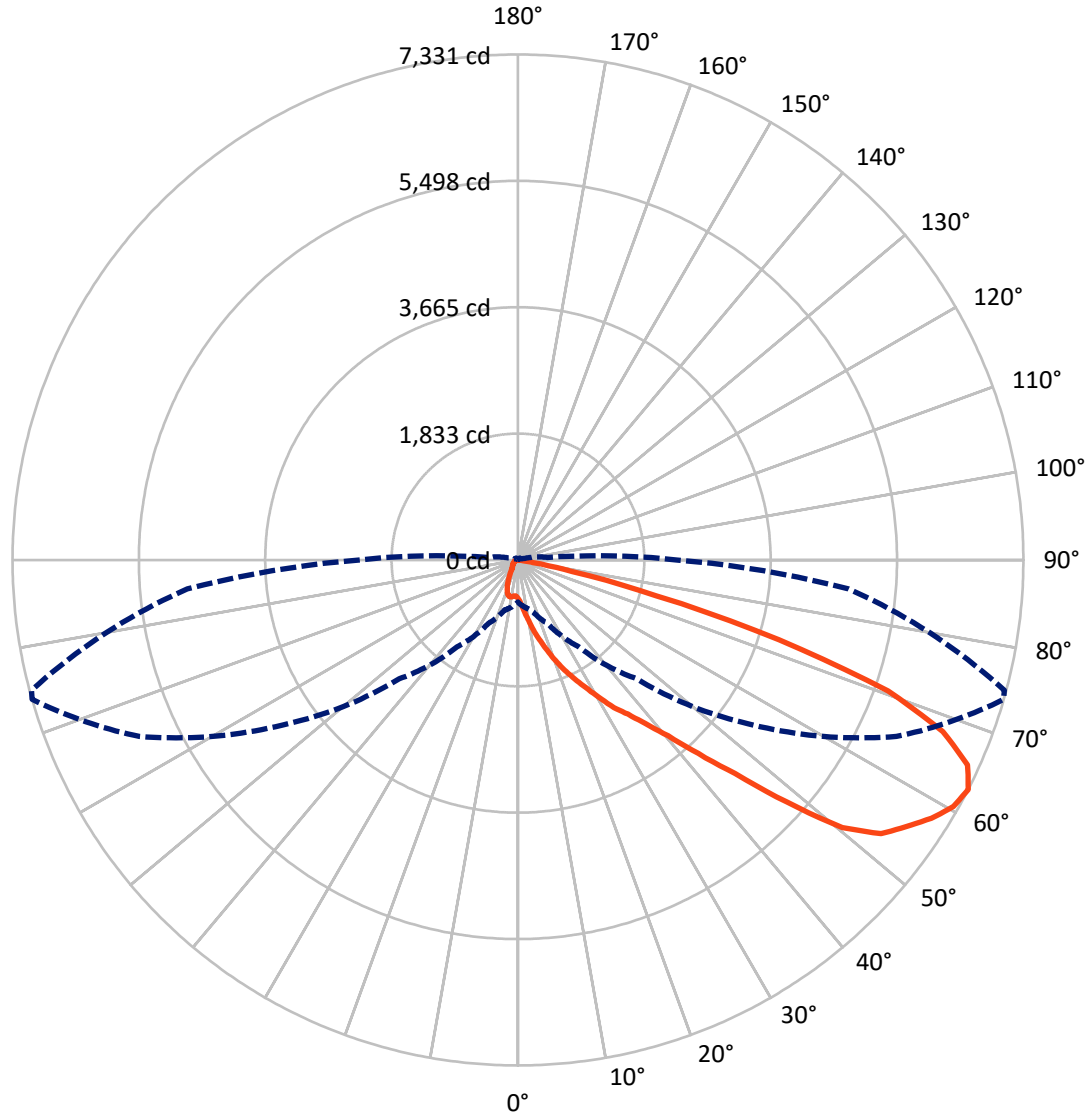
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 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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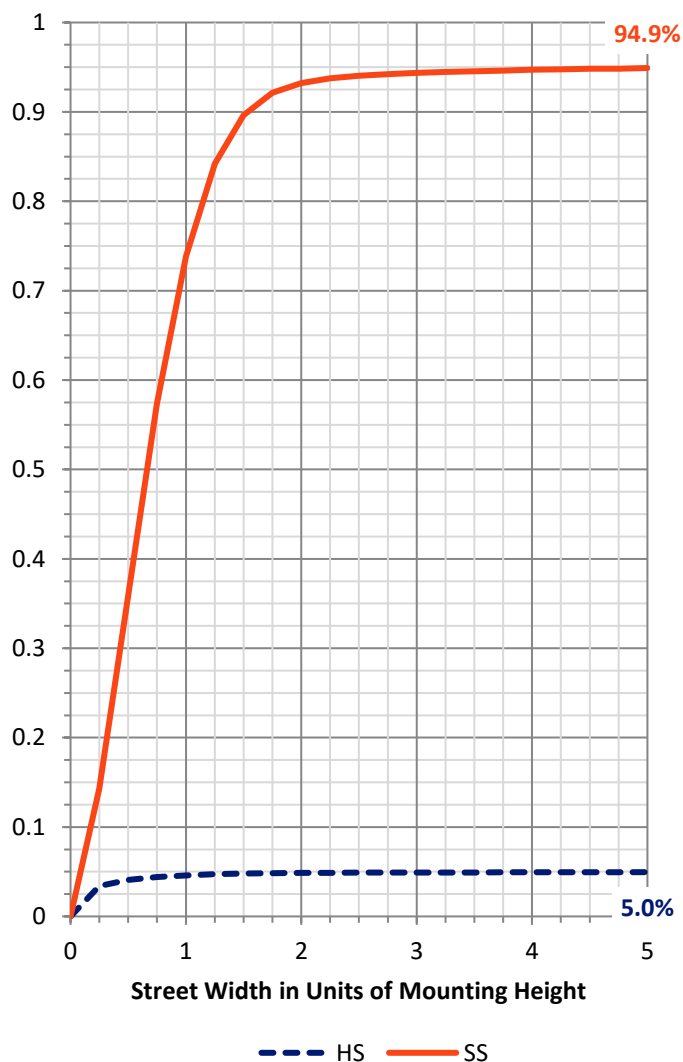
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	379.7	0.0	379.7
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	7233.3	0.0	7233.3
	% Fixture	95.0	0.0	95.0
Total	Lumens	7613.0	0.0	7613.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.7	0.9
10°-20°	292.8	3.8
20°-30°	628.3	8.3
30°-40°	1101.9	14.5
40°-50°	1708.2	22.4
50°-60°	1969.3	25.9
60°-70°	1383.5	18.2
70°-80°	431.0	5.7
80°-90°	28.5	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°	7613.0	100.0
0°-180°	7613.0	100.0

Coefficient of Utilization



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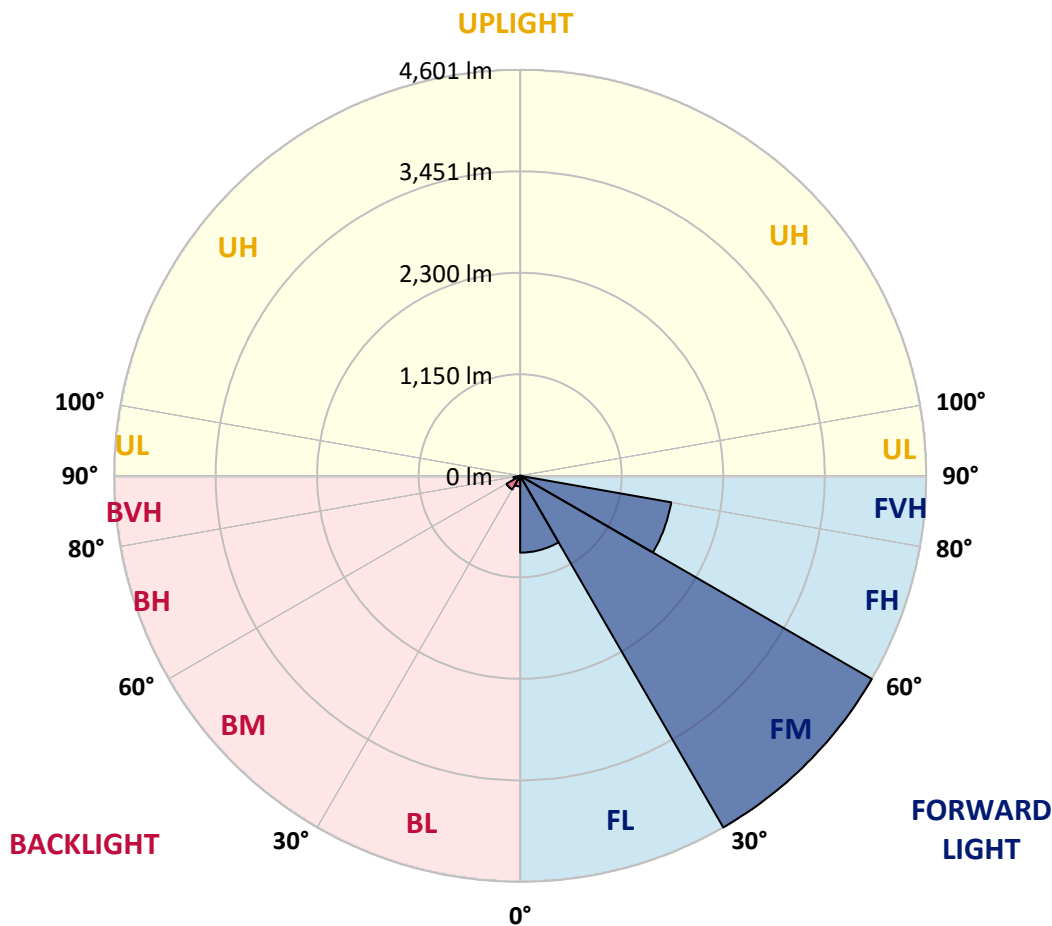
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	870.2	11.4			
FM (30°-60°)	4600.9	60.4			
FH (60°-80°)	1737.6	22.8			G1/1800
FVH (80°-90°)	24.6	0.3			G1/100
BL (0°-30°)	120.5	1.6	B1/500		
BM (30°-60°)	178.4	2.3	B0/220		
BH (60°-80°)	76.9	1.0	B0/110		G0/110
BVH (80°-90°)	3.9	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-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	557.3	557.3	557.3	557.3	557.3	557.3	557.3	557.3	557.3	557.3	557.3
2.5°	774.3	760.9	744.8	731.4	704.7	685.9	661.8	635.0	605.5	602.8	578.7
5°	1085.1	1044.9	1044.9	1010.1	969.9	897.6	830.6	747.5	685.9	680.5	616.2
7.5°	1404.0	1371.8	1353.0	1299.5	1235.2	1154.8	1047.6	908.3	795.8	777.0	672.5
10°	1701.4	1677.2	1642.4	1599.5	1543.3	1412.0	1278.0	1095.8	916.3	902.9	739.5
12.5°	1931.8	1902.3	1886.2	1867.5	1795.1	1690.6	1516.5	1286.1	1071.7	1042.2	806.5
15°	2105.9	2092.5	2076.5	2076.5	2038.9	1937.1	1757.6	1489.7	1221.8	1186.9	892.2
17.5°	2245.3	2229.2	2226.5	2242.6	2231.9	2159.5	1990.7	1685.3	1377.2	1350.4	980.6
20°	2400.7	2379.2	2379.2	2392.6	2389.9	2349.7	2202.4	1910.3	1559.4	1511.1	1082.4
22.5°	2620.4	2607.0	2596.2	2574.8	2558.7	2521.2	2392.6	2130.0	1733.5	1688.0	1186.9
25°	2915.1	2899.0	2850.8	2813.3	2743.6	2687.3	2577.5	2325.6	1910.3	1859.4	1288.7
27.5°	3201.8	3169.6	3124.1	3075.8	2998.1	2901.7	2765.0	2510.5	2095.2	2041.6	1393.2
30°	3504.5	3480.4	3424.1	3346.4	3250.0	3142.8	2979.4	2732.9	2306.9	2247.9	1505.8
32.5°	3745.7	3708.2	3657.2	3582.2	3483.1	3408.1	3231.2	2976.7	2550.7	2473.0	1623.7
35°	3938.6	3909.1	3842.1	3769.8	3694.8	3673.3	3480.4	3175.0	2746.3	2673.9	1749.6
37.5°	4061.8	4032.4	3976.1	3903.7	3874.3	3911.8	3785.9	3445.6	3008.9	2917.8	1894.3
40°	4158.3	4123.4	4077.9	4045.7	4035.0	4139.5	4126.1	3796.6	3354.5	3300.9	2092.5
42.5°	4227.9	4193.1	4163.6	4161.0	4230.6	4434.2	4584.3	4286.9	3836.8	3726.9	2347.1
45°	4139.5	4110.1	4126.1	4219.9	4388.7	4710.2	5138.9	4980.8	4418.2	4340.5	2754.3
47.5°	3893.0	3874.3	3946.6	4118.1	4431.6	4879.0	5674.8	5741.7	5248.8	5130.9	3282.1
50°	3507.2	3504.5	3619.7	3852.8	4297.6	4943.3	5945.4	6473.2	6100.8	5980.2	3710.8
52.5°	2984.7	2974.0	3142.8	3467.0	3981.4	4822.7	5996.3	6765.2	6593.8	6451.8	3981.4
55°	2392.6	2368.5	2569.5	2925.8	3515.2	4471.8	5859.6	6829.5	6829.5	6700.9	4182.4
57.5°	1682.6	1720.1	1886.2	2314.9	2939.2	3946.6	5522.0	6770.6	7068.0	6958.1	4453.0
60°	1061.0	1077.1	1259.3	1604.9	2229.2	3244.6	4919.2	6516.1	7258.2	7193.9	4670.0
62.5°	610.9	661.8	752.9	1015.5	1537.9	2438.2	4174.4	6057.9	7330.6	7303.8	4812.0
65°	372.4	377.8	420.7	573.4	945.8	1663.8	3341.1	5420.2	7167.1	7191.2	4785.2
67.5°	278.6	278.6	292.0	361.7	538.5	1058.3	2465.0	4645.9	6644.7	6722.4	4533.4
70°	241.1	241.1	243.8	265.3	332.2	627.0	1629.0	3745.7	5696.2	5688.2	3745.7
72.5°	190.2	198.3	214.3	225.1	251.9	367.1	953.8	2617.7	3957.3	4051.1	2411.4
75°	152.7	155.4	176.8	195.6	211.7	249.2	450.1	1454.9	2076.5	2076.5	1061.0
77.5°	117.9	123.2	136.6	155.4	176.8	176.8	187.6	562.7	803.8	777.0	313.5
80°	75.0	77.7	99.1	123.2	147.4	125.9	101.8	187.6	219.7	211.7	85.7
82.5°	45.5	48.2	64.3	99.1	99.1	69.7	64.3	77.7	69.7	64.3	34.8
85°	13.4	16.1	45.5	64.3	56.3	26.8	32.2	34.8	32.2	29.5	18.8
87.5°	2.7	2.7	13.4	16.1	13.4	13.4	10.7	13.4	13.4	13.4	8.0
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°	557.3	557.3	557.3	557.3	557.3	557.3	557.3	557.3	557.3	557.3	557.3
2.5°	565.3	554.6	533.2	517.1	503.7	490.3	479.6	476.9	471.6	471.6	468.9
5°	589.4	565.3	525.1	498.4	476.9	458.2	442.1	426.0	420.7	415.3	418.0
7.5°	627.0	589.4	533.2	493.0	455.5	412.6	377.8	348.3	326.9	321.5	313.5
10°	675.2	618.9	546.6	482.3	412.6	337.6	289.4	259.9	249.2	235.8	238.5
12.5°	723.4	653.7	557.3	452.8	340.3	265.3	225.1	206.3	198.3	195.6	198.3
15°	779.7	691.3	551.9	399.2	273.3	214.3	190.2	182.2	176.8	176.8	174.2
17.5°	835.9	723.4	533.2	329.6	219.7	182.2	171.5	163.4	158.1	155.4	155.4
20°	897.6	752.9	490.3	262.6	182.2	166.1	155.4	144.7	139.3	139.3	139.3
22.5°	961.9	774.3	434.0	209.0	163.4	147.4	136.6	128.6	123.2	123.2	123.2
25°	1018.1	785.0	367.1	174.2	150.0	134.0	123.2	115.2	112.5	109.9	109.9
27.5°	1071.7	782.4	297.4	152.7	134.0	120.6	109.9	104.5	99.1	99.1	99.1
30°	1125.3	766.3	235.8	139.3	123.2	107.2	99.1	93.8	91.1	88.4	88.4
32.5°	1170.9	739.5	184.9	128.6	112.5	96.5	88.4	83.1	83.1	80.4	80.4
35°	1216.4	699.3	155.4	120.6	101.8	88.4	80.4	77.7	75.0	75.0	75.0
37.5°	1264.6	648.4	136.6	109.9	91.1	80.4	75.0	72.3	69.7	67.0	67.0
40°	1323.6	597.5	128.6	101.8	83.1	72.3	67.0	64.3	61.6	61.6	61.6
42.5°	1417.4	554.6	120.6	91.1	75.0	67.0	61.6	56.3	56.3	53.6	53.6
45°	1594.2	538.5	112.5	83.1	69.7	58.9	56.3	50.9	48.2	48.2	48.2
47.5°	1824.6	541.2	104.5	75.0	64.3	53.6	50.9	48.2	42.9	42.9	42.9
50°	2014.8	527.8	96.5	69.7	56.3	50.9	45.5	42.9	40.2	40.2	40.2
52.5°	2089.9	503.7	88.4	64.3	53.6	45.5	42.9	40.2	37.5	37.5	37.5
55°	2164.9	493.0	80.4	56.3	48.2	45.5	40.2	37.5	34.8	32.2	32.2
57.5°	2301.5	498.4	72.3	53.6	45.5	42.9	37.5	32.2	26.8	24.1	24.1
60°	2373.9	479.6	67.0	48.2	42.9	40.2	32.2	24.1	18.8	16.1	16.1
62.5°	2312.2	426.0	61.6	45.5	40.2	34.8	24.1	18.8	13.4	8.0	8.0
65°	2140.8	351.0	56.3	42.9	34.8	26.8	21.4	13.4	8.0	5.4	5.4
67.5°	1923.7	276.0	50.9	40.2	32.2	24.1	18.8	10.7	5.4	2.7	2.7
70°	1554.0	198.3	48.2	37.5	29.5	21.4	16.1	10.7	5.4	2.7	2.7
72.5°	1002.1	128.6	42.9	34.8	26.8	21.4	13.4	8.0	5.4	2.7	2.7
75°	463.5	85.7	40.2	32.2	26.8	18.8	13.4	10.7	5.4	2.7	2.7
77.5°	136.6	61.6	37.5	29.5	24.1	18.8	13.4	10.7	5.4	2.7	2.7
80°	56.3	42.9	29.5	26.8	24.1	18.8	13.4	10.7	5.4	2.7	2.7
82.5°	26.8	18.8	13.4	10.7	13.4	13.4	10.7	10.7	5.4	2.7	2.7
85°	13.4	8.0	5.4	5.4	5.4	2.7	2.7	5.4	5.4	2.7	2.7
87.5°	8.0	5.4	5.4	5.4	2.7	2.7	2.7	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)