

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: P573517

Luminaire Tested: **ARCH-S-PA2-80-830-U-T2R-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573517
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-PA2-80-830-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 3000K, 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: 7234 lumens
Efficiency: N/A
Efficacy: 87.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

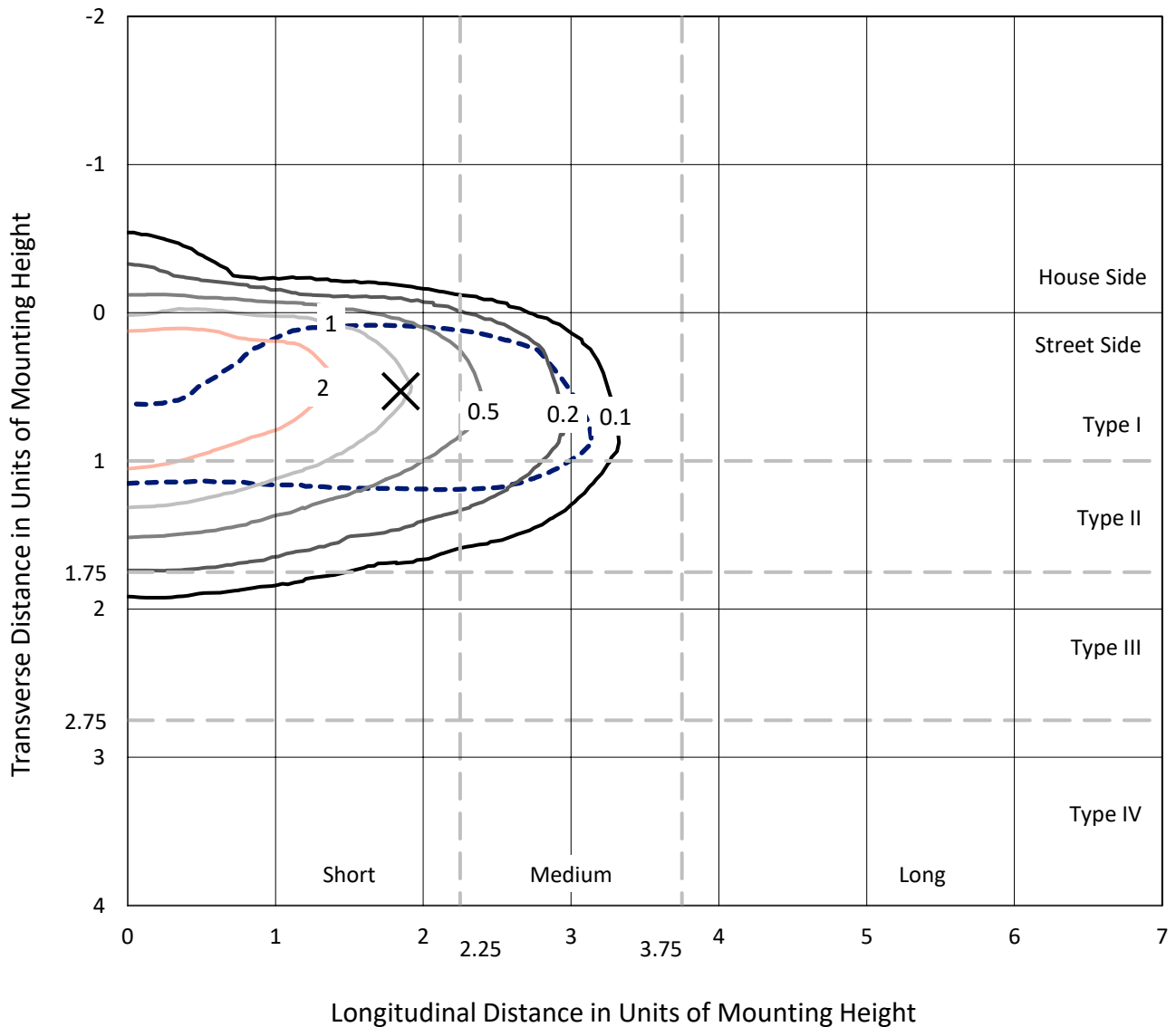
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

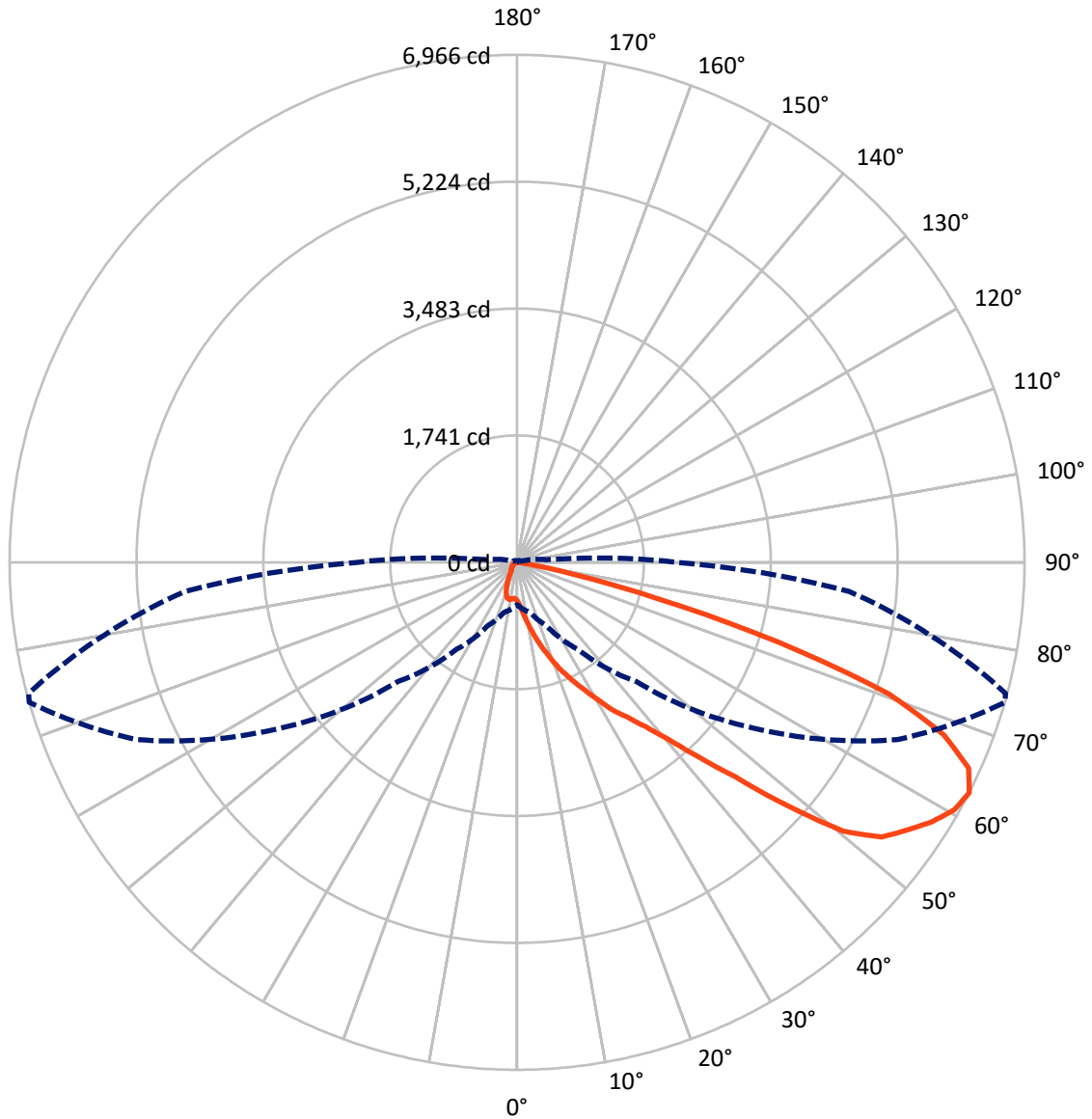
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 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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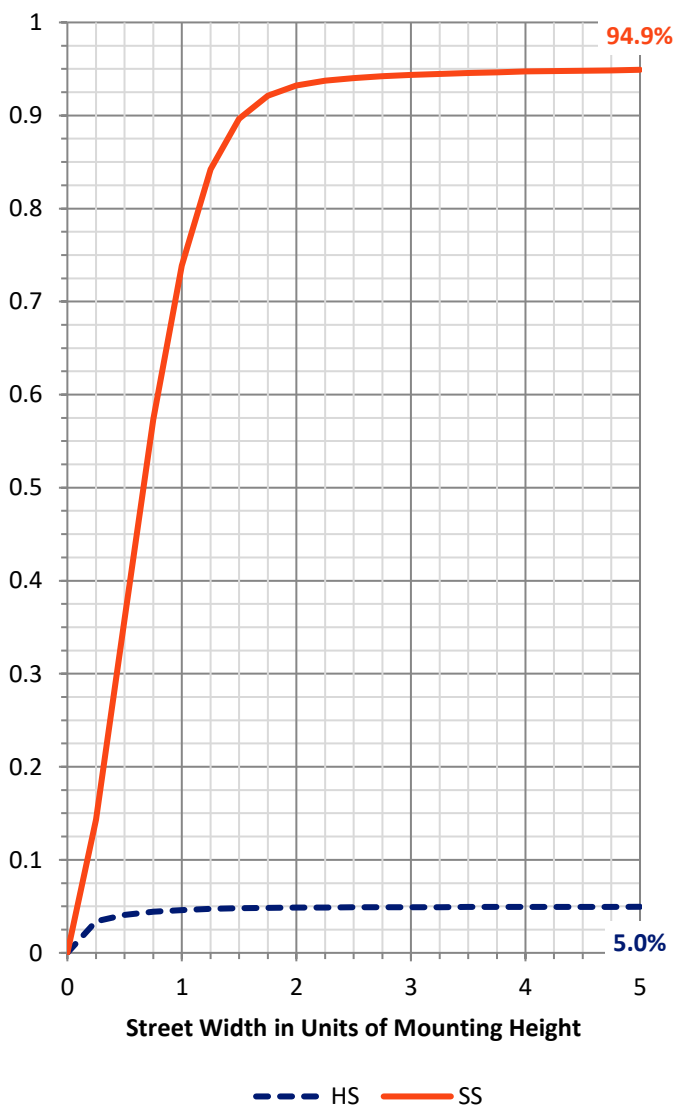
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	360.8	0.0	360.8
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	6873.2	0.0	6873.2
	% Fixture	95.0	0.0	95.0
Total	Lumens	7234.0	0.0	7234.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.2	0.9
10°-20°	278.2	3.8
20°-30°	597.0	8.3
30°-40°	1047.0	14.5
40°-50°	1623.2	22.4
50°-60°	1871.2	25.9
60°-70°	1314.6	18.2
70°-80°	409.6	5.7
80°-90°	27.1	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°	7234.0	100.0
0°-180°	7234.0	100.0

Coefficient of Utilization



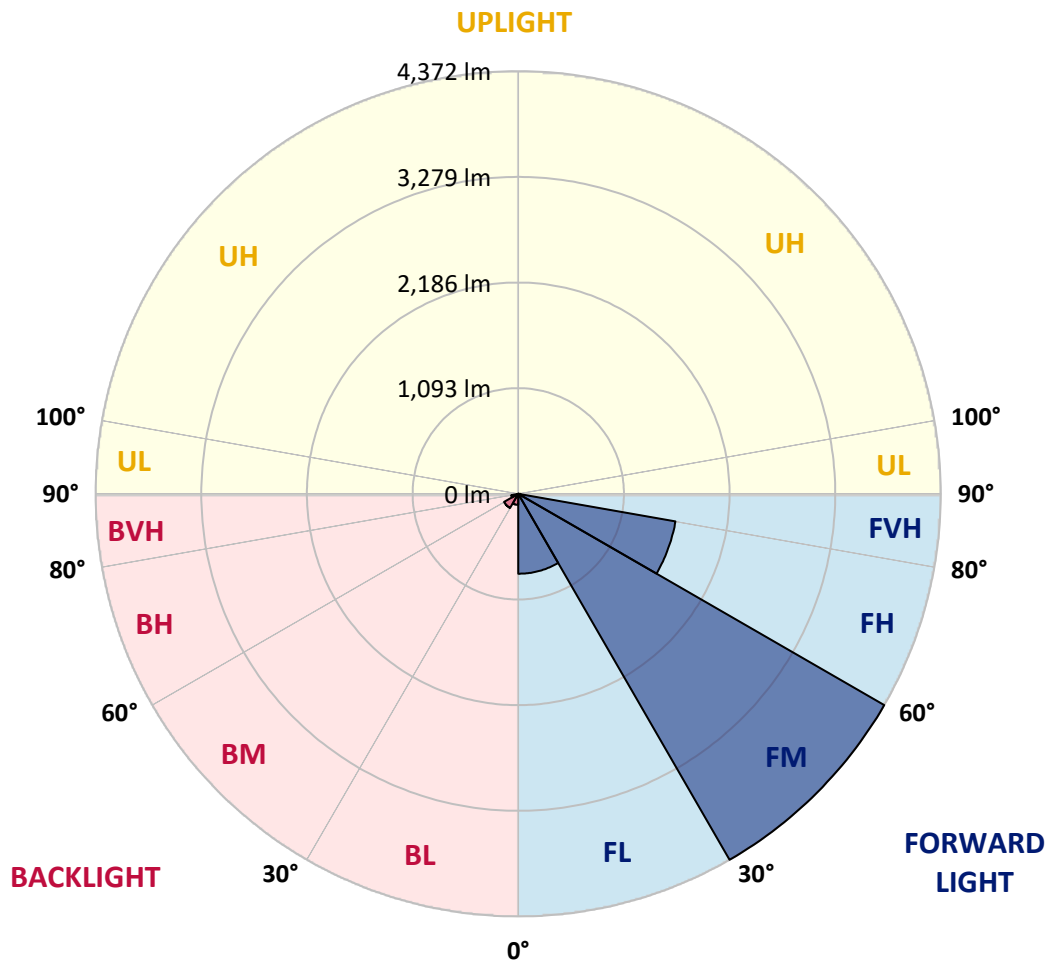
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	826.9	11.4			
FM (30°-60°)	4371.8	60.4			
FH (60°-80°)	1651.1	22.8			G1/1800
FVH (80°-90°)	23.4	0.3			G1/100
BL (0°-30°)	114.5	1.6	B1/500		
BM (30°-60°)	169.6	2.3	B0/220		
BH (60°-80°)	73.0	1.0	B0/110		G0/110
BVH (80°-90°)	3.7	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°	529.6	529.6	529.6	529.6	529.6	529.6	529.6	529.6	529.6	529.6	529.6
2.5°	735.8	723.0	707.8	695.0	669.6	651.8	628.8	603.4	575.4	572.8	549.9
5°	1031.1	992.9	992.9	959.8	921.6	852.9	789.2	710.3	651.8	646.7	585.6
7.5°	1334.1	1303.5	1285.7	1234.8	1173.7	1097.3	995.5	863.1	756.1	738.3	639.0
10°	1616.7	1593.7	1560.6	1519.9	1466.4	1341.7	1214.4	1041.3	870.7	858.0	702.7
12.5°	1835.6	1807.6	1792.3	1774.5	1705.8	1606.5	1441.0	1222.0	1018.4	990.4	766.3
15°	2001.1	1988.4	1973.1	1973.1	1937.4	1840.7	1670.1	1415.5	1160.9	1127.8	847.8
17.5°	2133.5	2118.2	2115.7	2130.9	2120.7	2052.0	1891.6	1601.4	1308.6	1283.1	931.8
20°	2281.1	2260.8	2260.8	2273.5	2271.0	2232.8	2092.7	1815.2	1481.7	1435.9	1028.6
22.5°	2489.9	2477.2	2467.0	2446.6	2431.4	2395.7	2273.5	2024.0	1647.2	1603.9	1127.8
25°	2770.0	2754.7	2708.9	2673.2	2607.0	2553.6	2449.2	2209.9	1815.2	1766.9	1224.6
27.5°	3042.4	3011.8	2968.5	2922.7	2848.9	2757.2	2627.4	2385.5	1990.9	1940.0	1323.9
30°	3330.1	3307.1	3253.7	3179.9	3088.2	2986.4	2831.1	2596.8	2192.0	2136.0	1430.8
32.5°	3559.2	3523.6	3475.2	3403.9	3309.7	3238.4	3070.4	2828.5	2423.7	2349.9	1542.8
35°	3742.5	3714.5	3650.8	3582.1	3510.8	3490.5	3307.1	3016.9	2609.6	2540.8	1662.5
37.5°	3859.6	3831.6	3778.1	3709.4	3681.4	3717.0	3597.4	3274.1	2859.1	2772.5	1800.0
40°	3951.3	3918.2	3874.9	3844.3	3834.2	3933.4	3920.7	3607.6	3187.5	3136.6	1988.4
42.5°	4017.5	3984.4	3956.4	3953.8	4020.0	4213.5	4356.1	4073.5	3645.8	3541.4	2230.2
45°	3933.4	3905.4	3920.7	4009.8	4170.2	4475.7	4883.1	4732.9	4198.2	4124.4	2617.2
47.5°	3699.2	3681.4	3750.1	3913.1	4210.9	4636.1	5392.3	5455.9	4987.5	4875.4	3118.7
50°	3332.6	3330.1	3439.5	3661.0	4083.7	4697.2	5649.4	6150.9	5797.1	5682.5	3526.1
52.5°	2836.2	2826.0	2986.4	3294.4	3783.2	4582.7	5697.8	6428.4	6265.5	6130.6	3783.2
55°	2273.5	2250.6	2441.5	2780.1	3340.2	4249.1	5567.9	6489.5	6489.5	6367.3	3974.2
57.5°	1598.8	1634.5	1792.3	2199.7	2792.9	3750.1	5247.1	6433.5	6716.1	6611.7	4231.3
60°	1008.2	1023.5	1196.6	1525.0	2118.2	3083.1	4674.3	6191.7	6896.9	6835.8	4437.5
62.5°	580.5	628.8	715.4	964.9	1461.4	2316.8	3966.5	5756.3	6965.6	6940.2	4572.5
65°	353.9	359.0	399.7	544.8	898.7	1581.0	3174.8	5150.4	6810.3	6833.2	4547.0
67.5°	264.8	264.8	277.5	343.7	511.7	1005.6	2342.2	4414.6	6313.9	6387.7	4307.7
70°	229.1	229.1	231.7	252.0	315.7	595.7	1547.9	3559.2	5412.6	5405.0	3559.2
72.5°	180.8	188.4	203.7	213.9	239.3	348.8	906.3	2487.4	3760.3	3849.4	2291.3
75°	145.1	147.7	168.0	185.9	201.1	236.8	427.7	1382.4	1973.1	1973.1	1008.2
77.5°	112.0	117.1	129.8	147.7	168.0	168.0	178.2	534.6	763.8	738.3	297.9
80°	71.3	73.8	94.2	117.1	140.0	119.7	96.7	178.2	208.8	201.1	81.5
82.5°	43.3	45.8	61.1	94.2	94.2	66.2	61.1	73.8	66.2	61.1	33.1
85°	12.7	15.3	43.3	61.1	53.5	25.5	30.6	33.1	30.6	28.0	17.8
87.5°	2.5	2.5	12.7	15.3	12.7	12.7	10.2	12.7	12.7	12.7	7.6
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°	529.6	529.6	529.6	529.6	529.6	529.6	529.6	529.6	529.6	529.6	529.6
2.5°	537.2	527.0	506.6	491.4	478.6	465.9	455.7	453.2	448.1	448.1	445.5
5°	560.1	537.2	499.0	473.5	453.2	435.4	420.1	404.8	399.7	394.6	397.2
7.5°	595.7	560.1	506.6	468.4	432.8	392.1	359.0	331.0	310.6	305.5	297.9
10°	641.6	588.1	519.4	458.3	392.1	320.8	275.0	247.0	236.8	224.0	226.6
12.5°	687.4	621.2	529.6	430.3	323.3	252.0	213.9	196.0	188.4	185.9	188.4
15°	740.9	656.8	524.5	379.3	259.7	203.7	180.8	173.1	168.0	168.0	165.5
17.5°	794.3	687.4	506.6	313.1	208.8	173.1	162.9	155.3	150.2	147.7	147.7
20°	852.9	715.4	465.9	249.5	173.1	157.8	147.7	137.5	132.4	132.4	132.4
22.5°	914.0	735.8	412.4	198.6	155.3	140.0	129.8	122.2	117.1	117.1	117.1
25°	967.4	746.0	348.8	165.5	142.6	127.3	117.1	109.5	106.9	104.4	104.4
27.5°	1018.4	743.4	282.6	145.1	127.3	114.6	104.4	99.3	94.2	94.2	94.2
30°	1069.3	728.1	224.0	132.4	117.1	101.8	94.2	89.1	86.6	84.0	84.0
32.5°	1112.6	702.7	175.7	122.2	106.9	91.7	84.0	78.9	78.9	76.4	76.4
35°	1155.8	664.5	147.7	114.6	96.7	84.0	76.4	73.8	71.3	71.3	71.3
37.5°	1201.7	616.1	129.8	104.4	86.6	76.4	71.3	68.7	66.2	63.6	63.6
40°	1257.7	567.7	122.2	96.7	78.9	68.7	63.6	61.1	58.6	58.6	58.6
42.5°	1346.8	527.0	114.6	86.6	71.3	63.6	58.6	53.5	53.5	50.9	50.9
45°	1514.8	511.7	106.9	78.9	66.2	56.0	53.5	48.4	45.8	45.8	45.8
47.5°	1733.8	514.3	99.3	71.3	61.1	50.9	48.4	45.8	40.7	40.7	40.7
50°	1914.5	501.5	91.7	66.2	53.5	48.4	43.3	40.7	38.2	38.2	38.2
52.5°	1985.8	478.6	84.0	61.1	50.9	43.3	40.7	38.2	35.6	35.6	35.6
55°	2057.1	468.4	76.4	53.5	45.8	43.3	38.2	35.6	33.1	30.6	30.6
57.5°	2186.9	473.5	68.7	50.9	43.3	40.7	35.6	30.6	25.5	22.9	22.9
60°	2255.7	455.7	63.6	45.8	40.7	38.2	30.6	22.9	17.8	15.3	15.3
62.5°	2197.1	404.8	58.6	43.3	38.2	33.1	22.9	17.8	12.7	7.6	7.6
65°	2034.2	333.5	53.5	40.7	33.1	25.5	20.4	12.7	7.6	5.1	5.1
67.5°	1828.0	262.2	48.4	38.2	30.6	22.9	17.8	10.2	5.1	2.5	2.5
70°	1476.6	188.4	45.8	35.6	28.0	20.4	15.3	10.2	5.1	2.5	2.5
72.5°	952.2	122.2	40.7	33.1	25.5	20.4	12.7	7.6	5.1	2.5	2.5
75°	440.4	81.5	38.2	30.6	25.5	17.8	12.7	10.2	5.1	2.5	2.5
77.5°	129.8	58.6	35.6	28.0	22.9	17.8	12.7	10.2	5.1	2.5	2.5
80°	53.5	40.7	28.0	25.5	22.9	17.8	12.7	10.2	5.1	2.5	2.5
82.5°	25.5	17.8	12.7	10.2	12.7	12.7	10.2	10.2	5.1	2.5	2.5
85°	12.7	7.6	5.1	5.1	5.1	2.5	2.5	5.1	5.1	2.5	2.5
87.5°	7.6	5.1	5.1	5.1	2.5	2.5	2.5	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)