

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: P573598

Luminaire Tested: **ARCH-S-PA2-90-830-U-T2R-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573598
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-PA2-90-830-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 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: 7848 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

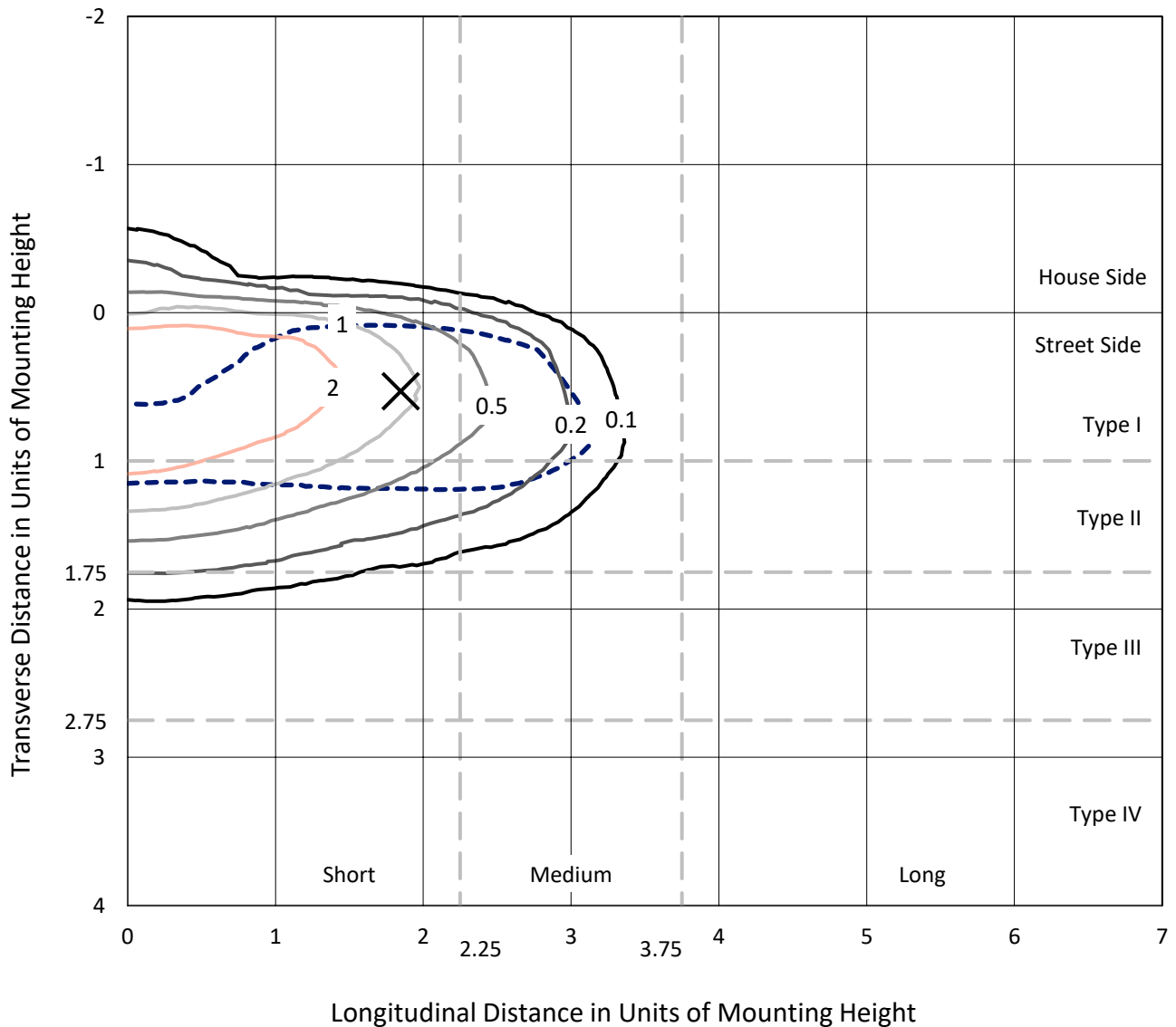
Input Watts (W): 92.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

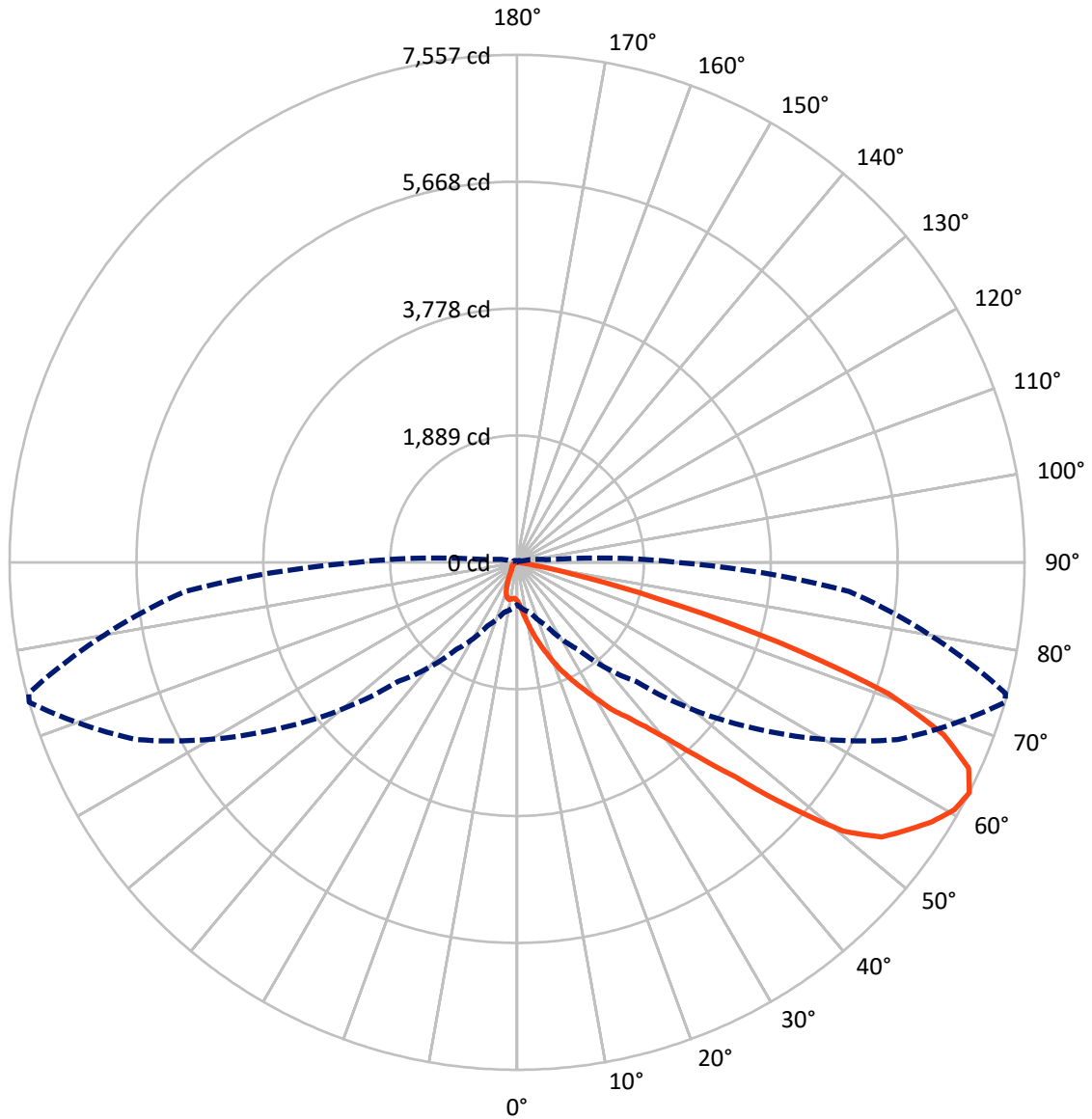
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 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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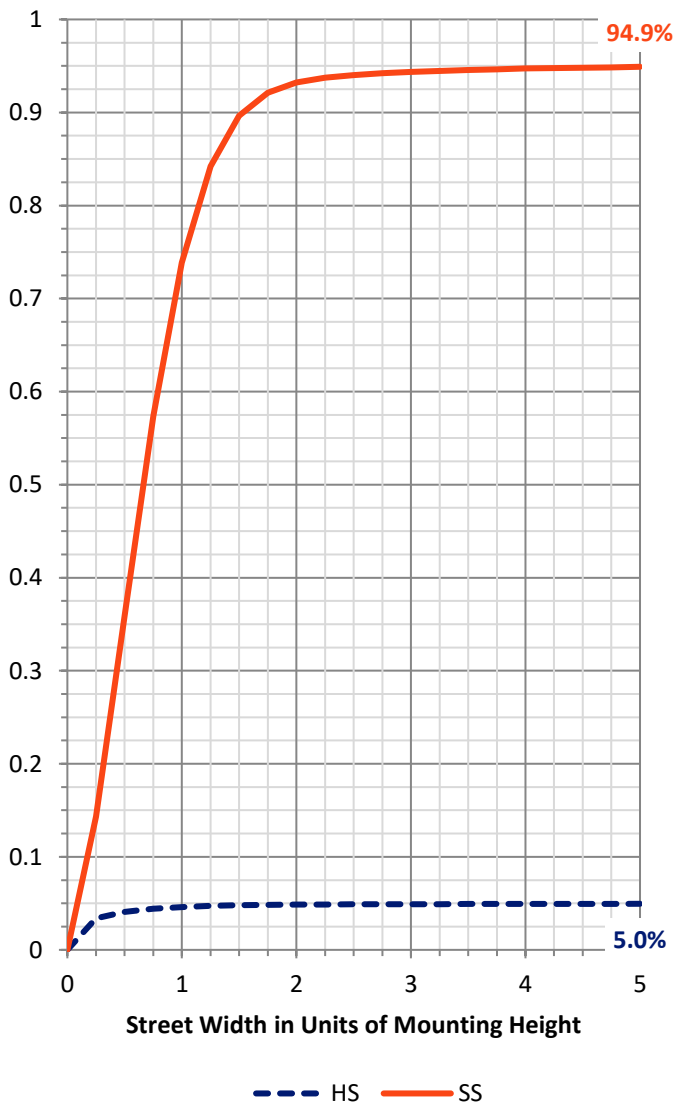
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	391.4	0.0	391.4
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	7456.6	0.0	7456.6
	% Fixture	95.0	0.0	95.0
Total	Lumens	7848.0	0.0	7848.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.8	0.9
10°-20°	301.8	3.8
20°-30°	647.7	8.3
30°-40°	1135.9	14.5
40°-50°	1760.9	22.4
50°-60°	2030.1	25.9
60°-70°	1426.2	18.2
70°-80°	444.3	5.7
80°-90°	29.4	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°	7848.0	100.0
0°-180°	7848.0	100.0

Coefficient of Utilization

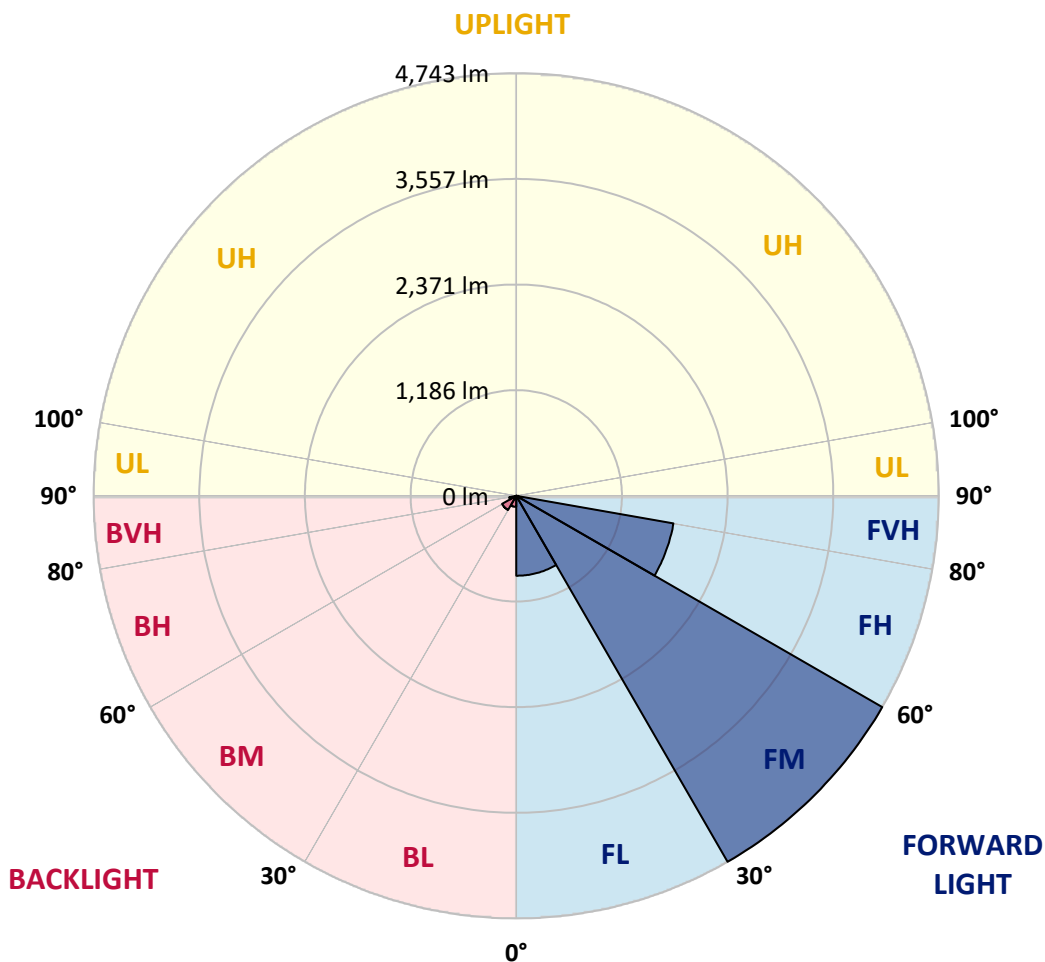


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	897.1	11.4			
FM (30°-60°)	4742.9	60.4			
FH (60°-80°)	1791.3	22.8			G1/1800
FVH (80°-90°)	25.3	0.3			G1/100
BL (0°-30°)	124.2	1.6	B1/500		
BM (30°-60°)	183.9	2.3	B0/220		
BH (60°-80°)	79.2	1.0	B0/110		G0/110
BVH (80°-90°)	4.0	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°	574.5	574.5	574.5	574.5	574.5	574.5	574.5	574.5	574.5	574.5	574.5
2.5°	798.2	784.4	767.8	754.0	726.4	707.1	682.2	654.6	624.2	621.5	596.6
5°	1118.6	1077.2	1077.2	1041.3	999.8	925.3	856.2	770.6	707.1	701.6	635.3
7.5°	1447.3	1414.1	1394.8	1339.6	1273.3	1190.4	1079.9	936.3	820.3	801.0	693.3
10°	1753.9	1729.0	1693.1	1648.9	1590.9	1455.6	1317.5	1129.7	944.6	930.8	762.3
12.5°	1991.4	1961.0	1944.5	1925.1	1850.5	1742.8	1563.3	1325.8	1104.8	1074.4	831.4
15°	2170.9	2157.1	2140.6	2140.6	2101.9	1996.9	1811.9	1535.7	1259.5	1223.6	919.7
17.5°	2314.6	2298.0	2295.2	2311.8	2300.8	2226.2	2052.2	1737.3	1419.7	1392.1	1010.9
20°	2474.8	2452.7	2452.7	2466.5	2463.7	2422.3	2270.4	1969.3	1607.5	1557.8	1115.9
22.5°	2701.2	2687.4	2676.4	2654.3	2637.7	2599.0	2466.5	2195.8	1787.0	1740.1	1223.6
25°	3005.1	2988.5	2938.8	2900.1	2828.3	2770.3	2657.1	2397.4	1969.3	1916.8	1328.5
27.5°	3300.6	3267.5	3220.5	3170.8	3090.7	2991.3	2850.4	2588.0	2159.9	2104.7	1436.2
30°	3612.7	3587.8	3529.8	3449.7	3350.3	3239.8	3071.4	2817.2	2378.1	2317.3	1552.2
32.5°	3861.3	3822.6	3770.1	3692.8	3590.6	3513.3	3331.0	3068.6	2629.4	2549.3	1673.8
35°	4060.2	4029.8	3960.7	3886.1	3808.8	3786.7	3587.8	3273.0	2831.1	2756.5	1803.6
37.5°	4187.2	4156.8	4098.8	4024.2	3993.9	4032.5	3902.7	3551.9	3101.7	3007.8	1952.7
40°	4286.6	4250.7	4203.8	4170.6	4159.6	4267.3	4253.5	3913.8	3458.0	3402.8	2157.1
42.5°	4358.4	4322.5	4292.2	4289.4	4361.2	4571.1	4725.8	4419.2	3955.2	3842.0	2419.5
45°	4267.3	4236.9	4253.5	4350.2	4524.2	4855.6	5297.5	5134.6	4554.6	4474.5	2839.3
47.5°	4013.2	3993.9	4068.4	4245.2	4568.4	5029.6	5849.9	5919.0	5410.8	5289.2	3383.5
50°	3615.5	3612.7	3731.5	3971.8	4430.3	5095.9	6128.9	6673.0	6289.1	6164.8	3825.4
52.5°	3076.9	3065.8	3239.8	3574.0	4104.3	4971.6	6181.4	6974.1	6797.3	6650.9	4104.3
55°	2466.5	2441.6	2648.8	3016.1	3623.8	4609.8	6040.5	7040.4	7040.4	6907.8	4311.5
57.5°	1734.5	1773.2	1944.5	2386.4	3029.9	4068.4	5692.5	6979.6	7286.2	7172.9	4590.5
60°	1093.8	1110.3	1298.1	1654.4	2298.0	3344.8	5071.0	6717.2	7482.3	7416.0	4814.2
62.5°	629.7	682.2	776.1	1046.8	1585.4	2513.4	4303.2	6244.9	7556.9	7529.2	4960.6
65°	383.9	389.4	433.6	591.1	975.0	1715.2	3444.2	5587.5	7388.4	7413.2	4932.9
67.5°	287.2	287.2	301.1	372.9	555.2	1091.0	2541.0	4789.3	6849.8	6929.9	4673.3
70°	248.6	248.6	251.3	273.4	342.5	646.3	1679.3	3861.3	5872.0	5863.7	3861.3
72.5°	196.1	204.4	221.0	232.0	259.6	378.4	983.3	2698.5	4079.5	4176.2	2485.8
75°	157.4	160.2	182.3	201.6	218.2	256.9	464.0	1499.8	2140.6	2140.6	1093.8
77.5°	121.5	127.1	140.9	160.2	182.3	182.3	193.3	580.0	828.6	801.0	323.2
80°	77.3	80.1	102.2	127.1	151.9	129.8	105.0	193.3	226.5	218.2	88.4
82.5°	47.0	49.7	66.3	102.2	102.2	71.8	66.3	80.1	71.8	66.3	35.9
85°	13.8	16.6	47.0	66.3	58.0	27.6	33.1	35.9	33.1	30.4	19.3
87.5°	2.8	2.8	13.8	16.6	13.8	13.8	11.0	13.8	13.8	13.8	8.3
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°	574.5	574.5	574.5	574.5	574.5	574.5	574.5	574.5	574.5	574.5	574.5
2.5°	582.8	571.7	549.6	533.1	519.3	505.4	494.4	491.6	486.1	486.1	483.4
5°	607.6	582.8	541.4	513.7	491.6	472.3	455.7	439.2	433.6	428.1	430.9
7.5°	646.3	607.6	549.6	508.2	469.5	425.3	389.4	359.1	337.0	331.4	323.2
10°	696.0	638.0	563.4	497.2	425.3	348.0	298.3	267.9	256.9	243.1	245.8
12.5°	745.7	673.9	574.5	466.8	350.8	273.4	232.0	212.7	204.4	201.6	204.4
15°	803.7	712.6	569.0	411.5	281.7	221.0	196.1	187.8	182.3	182.3	179.5
17.5°	861.7	745.7	549.6	339.7	226.5	187.8	176.8	168.5	163.0	160.2	160.2
20°	925.3	776.1	505.4	270.7	187.8	171.2	160.2	149.1	143.6	143.6	143.6
22.5°	991.6	798.2	447.4	215.4	168.5	151.9	140.9	132.6	127.1	127.1	127.1
25°	1049.6	809.3	378.4	179.5	154.7	138.1	127.1	118.8	116.0	113.2	113.2
27.5°	1104.8	806.5	306.6	157.4	138.1	124.3	113.2	107.7	102.2	102.2	102.2
30°	1160.0	789.9	243.1	143.6	127.1	110.5	102.2	96.7	93.9	91.1	91.1
32.5°	1207.0	762.3	190.6	132.6	116.0	99.4	91.1	85.6	85.6	82.9	82.9
35°	1254.0	720.9	160.2	124.3	105.0	91.1	82.9	80.1	77.3	77.3	77.3
37.5°	1303.7	668.4	140.9	113.2	93.9	82.9	77.3	74.6	71.8	69.1	69.1
40°	1364.4	615.9	132.6	105.0	85.6	74.6	69.1	66.3	63.5	63.5	63.5
42.5°	1461.1	571.7	124.3	93.9	77.3	69.1	63.5	58.0	58.0	55.2	55.2
45°	1643.4	555.2	116.0	85.6	71.8	60.8	58.0	52.5	49.7	49.7	49.7
47.5°	1880.9	557.9	107.7	77.3	66.3	55.2	52.5	49.7	44.2	44.2	44.2
50°	2077.0	544.1	99.4	71.8	58.0	52.5	47.0	44.2	41.4	41.4	41.4
52.5°	2154.4	519.3	91.1	66.3	55.2	47.0	44.2	41.4	38.7	38.7	38.7
55°	2231.7	508.2	82.9	58.0	49.7	47.0	41.4	38.7	35.9	33.1	33.1
57.5°	2372.6	513.7	74.6	55.2	47.0	44.2	38.7	33.1	27.6	24.9	24.9
60°	2447.1	494.4	69.1	49.7	44.2	41.4	33.1	24.9	19.3	16.6	16.6
62.5°	2383.6	439.2	63.5	47.0	41.4	35.9	24.9	19.3	13.8	8.3	8.3
65°	2206.8	361.8	58.0	44.2	35.9	27.6	22.1	13.8	8.3	5.5	5.5
67.5°	1983.1	284.5	52.5	41.4	33.1	24.9	19.3	11.0	5.5	2.8	2.8
70°	1602.0	204.4	49.7	38.7	30.4	22.1	16.6	11.0	5.5	2.8	2.8
72.5°	1033.0	132.6	44.2	35.9	27.6	22.1	13.8	8.3	5.5	2.8	2.8
75°	477.8	88.4	41.4	33.1	27.6	19.3	13.8	11.0	5.5	2.8	2.8
77.5°	140.9	63.5	38.7	30.4	24.9	19.3	13.8	11.0	5.5	2.8	2.8
80°	58.0	44.2	30.4	27.6	24.9	19.3	13.8	11.0	5.5	2.8	2.8
82.5°	27.6	19.3	13.8	11.0	13.8	13.8	11.0	11.0	5.5	2.8	2.8
85°	13.8	8.3	5.5	5.5	5.5	2.8	2.8	5.5	5.5	2.8	2.8
87.5°	8.3	5.5	5.5	5.5	2.8	2.8	2.8	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)