

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: P573431

Luminaire Tested: **ARCH-S-PA2-70-827-U-T3-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573431
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-18)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-70-827-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 725mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5857 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

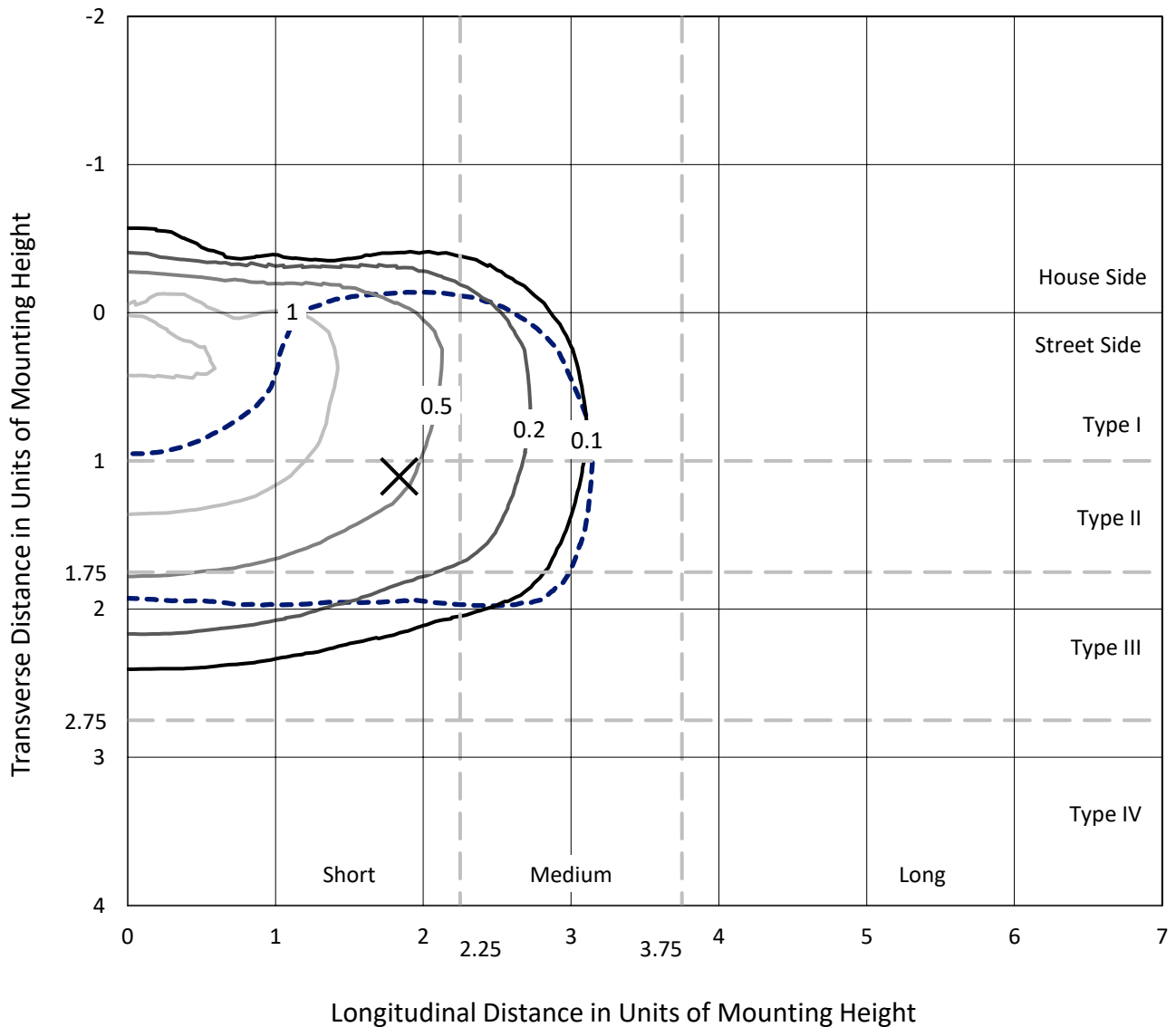
Input Watts (W): 73.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

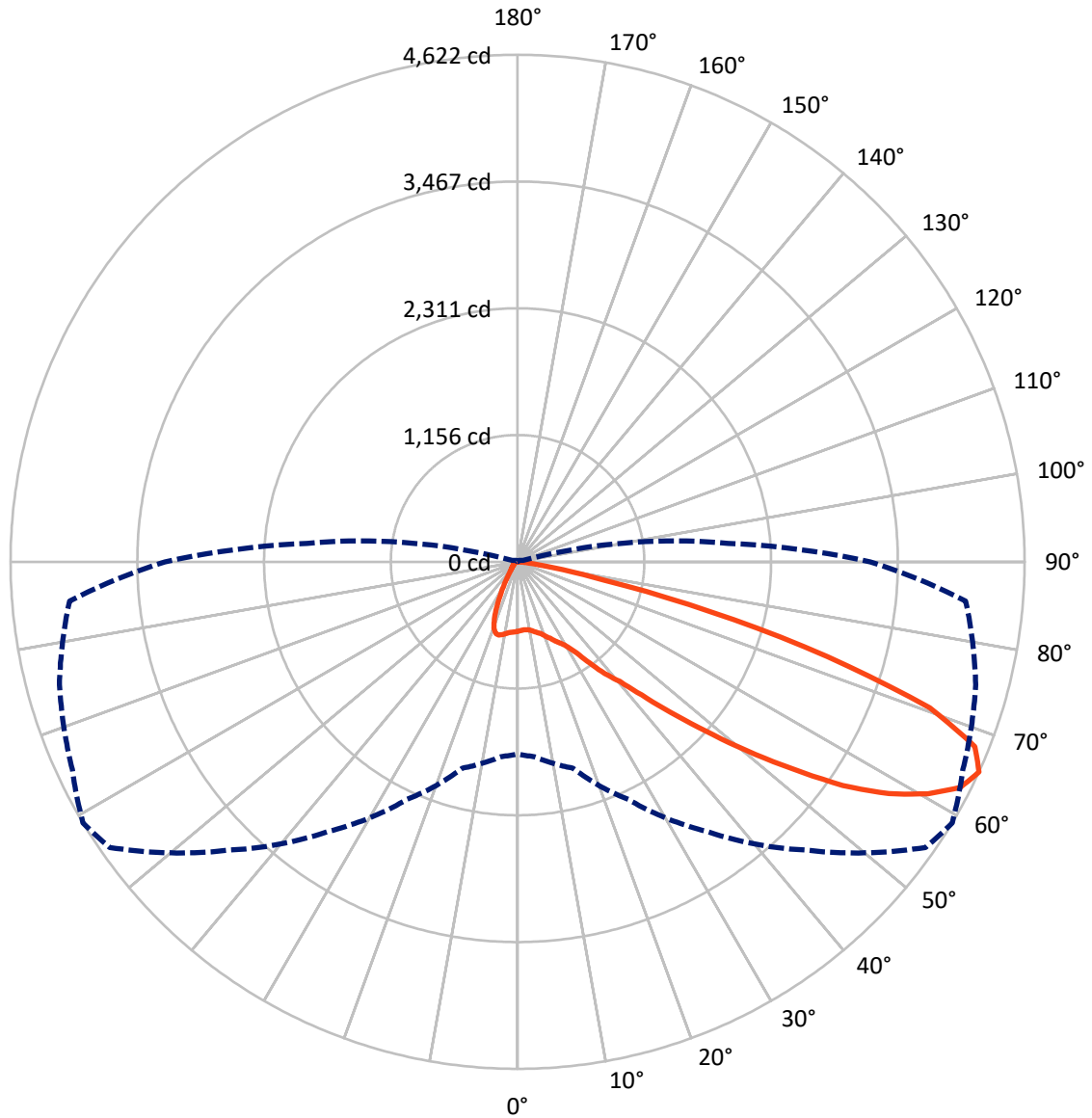
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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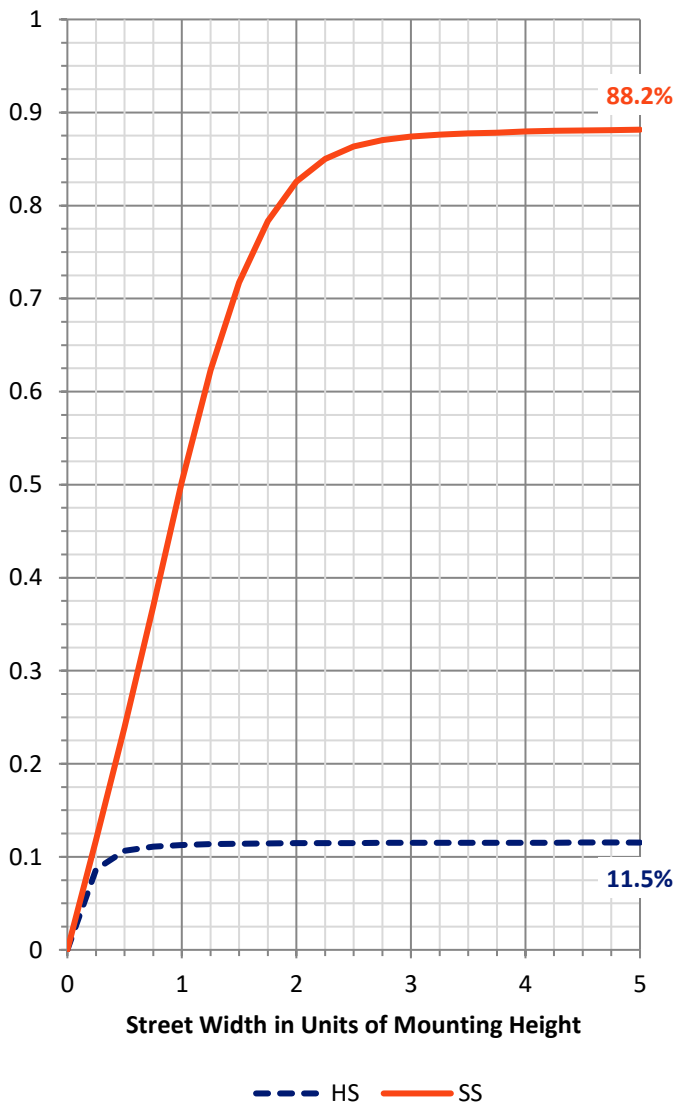
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	683.3	0.0	683.3
	% Fixture	11.7	0.0	11.7
Street Side	Lumens	5173.7	0.0	5173.7
	% Fixture	88.3	0.0	88.3
Total	Lumens	5857.0	0.0	5857.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.8	1.0
10°-20°	169.9	2.9
20°-30°	288.6	4.9
30°-40°	511.2	8.7
40°-50°	964.3	16.5
50°-60°	1631.6	27.9
60°-70°	1696.3	29.0
70°-80°	508.7	8.7
80°-90°	26.7	0.5
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°	5857.0	100.0
0°-180°	5857.0	100.0

Coefficient of Utilization



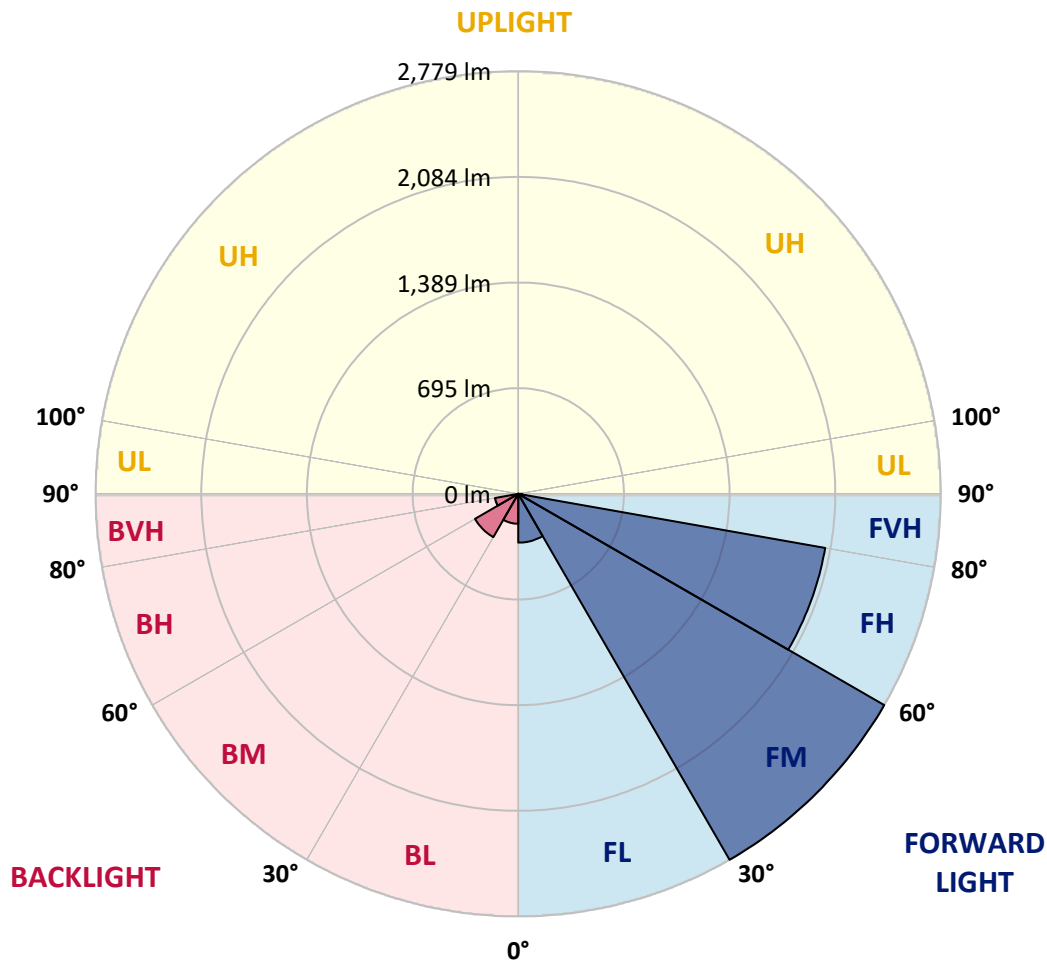
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	321.2	5.5			
FM	(30°-60°)	2778.6	47.4			
FH	(60°-80°)	2049.5	35.0			G2/5000
FVH	(80°-90°)	24.4	0.4			G1/100
BL	(0°-30°)	197.1	3.4	B1/500		
BM	(30°-60°)	328.5	5.6	B1/1000		
BH	(60°-80°)	155.5	2.7	B1/500		G1/500
BVH	(80°-90°)	2.2	0.0			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	632.9	632.9	632.9	632.9	632.9	632.9	632.9	632.9	632.9	632.9	632.9
2.5°	615.9	613.7	613.7	618.0	620.1	622.3	626.5	626.5	626.5	630.8	632.9
5°	586.0	586.0	588.2	592.4	600.9	607.3	620.1	622.3	624.4	635.0	639.3
7.5°	566.8	566.8	569.0	577.5	588.2	603.1	620.1	624.4	630.8	645.7	656.3
10°	564.7	562.6	566.8	575.4	588.2	607.3	626.5	632.9	645.7	664.9	679.8
12.5°	571.1	569.0	573.2	581.8	594.5	613.7	639.3	650.0	664.9	690.4	711.8
15°	575.4	573.2	577.5	588.2	603.1	626.5	656.3	669.1	688.3	724.5	745.9
17.5°	588.2	586.0	588.2	596.7	611.6	637.2	675.5	688.3	720.3	760.8	784.2
20°	645.7	643.6	630.8	626.5	628.6	652.1	701.1	722.4	760.8	811.9	829.0
22.5°	765.0	756.5	733.1	694.7	669.1	677.7	733.1	756.5	807.6	865.2	878.0
25°	924.9	918.5	884.4	818.3	745.9	724.5	769.3	801.3	863.1	927.0	922.7
27.5°	1106.0	1093.2	1061.2	969.6	871.6	801.3	814.0	841.7	909.9	978.1	956.8
30°	1263.7	1259.4	1223.2	1146.5	1031.4	927.0	882.2	897.2	959.0	1031.4	1005.8
32.5°	1408.6	1395.8	1366.0	1293.5	1187.0	1080.4	990.9	990.9	1042.1	1127.3	1088.9
35°	1568.4	1559.9	1523.7	1451.2	1348.9	1223.2	1142.2	1133.7	1176.3	1272.2	1189.1
37.5°	1732.5	1711.2	1694.1	1619.6	1517.3	1408.6	1310.6	1291.4	1312.7	1383.0	1280.7
40°	1937.1	1937.1	1898.7	1830.5	1734.6	1619.6	1483.2	1434.2	1427.8	1519.4	1440.6
42.5°	2175.8	2169.4	2137.4	2073.5	1981.8	1875.3	1702.7	1657.9	1653.7	1764.5	1670.7
45°	2450.7	2446.4	2408.0	2354.8	2290.8	2173.6	2003.1	1958.4	1932.8	2060.7	1949.9
47.5°	2702.1	2687.2	2674.4	2680.8	2644.6	2512.4	2352.6	2299.3	2297.2	2397.4	2254.6
50°	2874.7	2866.2	2910.9	2953.6	3021.8	2938.6	2749.0	2702.1	2665.9	2798.0	2572.1
52.5°	2987.7	2983.4	3072.9	3194.4	3335.0	3328.6	3160.3	3132.6	3102.7	3139.0	2855.5
55°	3032.4	3032.4	3139.0	3362.7	3609.9	3716.5	3637.6	3599.3	3494.8	3420.3	3166.7
57.5°	2979.1	2972.7	3111.3	3403.2	3780.4	3999.9	4034.0	3989.2	3825.1	3742.0	3511.9
60°	2753.3	2757.5	2921.6	3290.3	3767.6	4115.0	4334.5	4294.0	4129.9	4006.3	3801.7
62.5°	2331.3	2367.5	2540.2	2940.8	3494.8	4023.3	4507.1	4528.4	4351.5	4198.1	4059.6
65°	1751.7	1783.6	1947.7	2391.0	2998.3	3716.5	4539.0	4622.1	4479.4	4323.8	4100.0
67.5°	1065.5	1076.2	1276.5	1611.0	2207.7	3096.3	4315.3	4496.4	4394.1	4138.4	3699.4
70°	496.5	524.2	622.3	880.1	1397.9	2280.2	3729.3	3985.0	3869.9	3552.4	2812.9
72.5°	193.9	202.4	264.2	407.0	741.6	1434.2	2783.1	2953.6	2874.7	2523.1	1677.1
75°	95.9	102.3	127.9	193.9	338.8	592.4	1700.5	1811.4	1681.4	1267.9	709.6
77.5°	70.3	70.3	85.2	119.3	185.4	219.5	716.0	803.4	758.6	490.1	193.9
80°	46.9	51.1	59.7	81.0	117.2	106.6	270.6	321.8	268.5	151.3	68.2
82.5°	27.7	29.8	44.8	57.5	78.8	61.8	91.6	102.3	110.8	74.6	32.0
85°	14.9	14.9	29.8	42.6	42.6	27.7	32.0	36.2	42.6	44.8	17.0
87.5°	4.3	4.3	19.2	25.6	17.0	14.9	17.0	17.0	19.2	23.4	8.5
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°	632.9	632.9	632.9	632.9	632.9	632.9	632.9	632.9	632.9	632.9	632.9
2.5°	635.0	635.0	637.2	637.2	639.3	639.3	639.3	639.3	641.4	643.6	643.6
5°	641.4	643.6	643.6	643.6	643.6	639.3	637.2	635.0	635.0	637.2	637.2
7.5°	658.5	660.6	658.5	654.2	647.8	639.3	630.8	630.8	628.6	630.8	628.6
10°	684.1	684.1	681.9	671.3	660.6	643.6	626.5	613.7	605.2	603.1	598.8
12.5°	716.0	716.0	709.6	690.4	671.3	639.3	594.5	551.9	517.8	502.9	498.7
15°	748.0	748.0	739.5	711.8	673.4	596.7	502.9	413.4	362.3	341.0	328.2
17.5°	786.3	782.1	767.2	728.8	650.0	511.4	360.1	268.5	228.0	208.8	208.8
20°	826.8	822.6	794.9	730.9	590.3	366.5	234.4	185.4	174.7	170.5	170.5
22.5°	871.6	860.9	818.3	713.9	464.6	249.3	176.9	164.1	159.8	157.7	157.7
25°	907.8	890.8	835.4	667.0	332.4	174.7	155.6	151.3	142.8	140.6	136.4
27.5°	935.5	909.9	841.7	566.8	219.5	144.9	138.5	130.0	121.5	112.9	112.9
30°	971.7	939.8	846.0	441.1	149.2	125.7	119.3	108.7	98.0	89.5	89.5
32.5°	1044.2	997.3	848.1	309.0	123.6	110.8	98.0	85.2	74.6	70.3	68.2
35°	1123.0	1059.1	824.7	200.3	108.7	93.8	78.8	68.2	57.5	55.4	55.4
37.5°	1210.4	1150.7	773.6	136.4	95.9	78.8	63.9	53.3	46.9	44.8	44.8
40°	1357.4	1287.1	688.3	108.7	83.1	66.1	53.3	44.8	40.5	38.4	38.4
42.5°	1568.4	1446.9	581.8	93.8	72.5	55.4	42.6	36.2	34.1	32.0	32.0
45°	1811.4	1626.0	458.2	85.2	63.9	46.9	36.2	32.0	29.8	27.7	27.7
47.5°	2090.5	1811.4	362.3	74.6	55.4	40.5	32.0	27.7	25.6	23.4	23.4
50°	2354.8	1956.3	272.8	66.1	49.0	34.1	27.7	25.6	23.4	21.3	21.3
52.5°	2572.1	2054.3	206.7	57.5	42.6	29.8	25.6	23.4	19.2	19.2	19.2
55°	2834.2	2131.0	157.7	51.1	38.4	27.7	23.4	19.2	17.0	14.9	14.9
57.5°	3062.2	2158.7	115.1	44.8	34.1	25.6	21.3	17.0	12.8	10.7	10.7
60°	3215.7	2135.3	83.1	38.4	29.8	21.3	17.0	12.8	8.5	6.4	6.4
62.5°	3324.4	2084.1	63.9	34.1	25.6	19.2	14.9	10.7	6.4	4.3	4.3
65°	3215.7	1926.4	51.1	29.8	21.3	17.0	10.7	8.5	4.3	2.1	2.1
67.5°	2781.0	1615.3	40.5	25.6	19.2	14.9	10.7	6.4	2.1	0.0	0.0
70°	1998.9	1152.9	34.1	23.4	17.0	12.8	8.5	4.3	2.1	0.0	0.0
72.5°	1114.5	594.5	32.0	21.3	17.0	12.8	8.5	4.3	2.1	0.0	0.0
75°	451.8	204.6	29.8	21.3	17.0	10.7	8.5	4.3	2.1	0.0	0.0
77.5°	132.1	70.3	25.6	19.2	17.0	12.8	8.5	4.3	2.1	0.0	0.0
80°	46.9	32.0	19.2	17.0	12.8	10.7	8.5	6.4	2.1	0.0	0.0
82.5°	21.3	12.8	8.5	6.4	6.4	6.4	6.4	4.3	2.1	0.0	0.0
85°	8.5	6.4	4.3	2.1	2.1	2.1	2.1	2.1	2.1	0.0	0.0
87.5°	6.4	4.3	2.1	2.1	2.1	2.1	0.0	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)