

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: P398113

Luminaire Tested: **ARCH-S-PA1-90-727-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398113
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-90-727-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9808 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

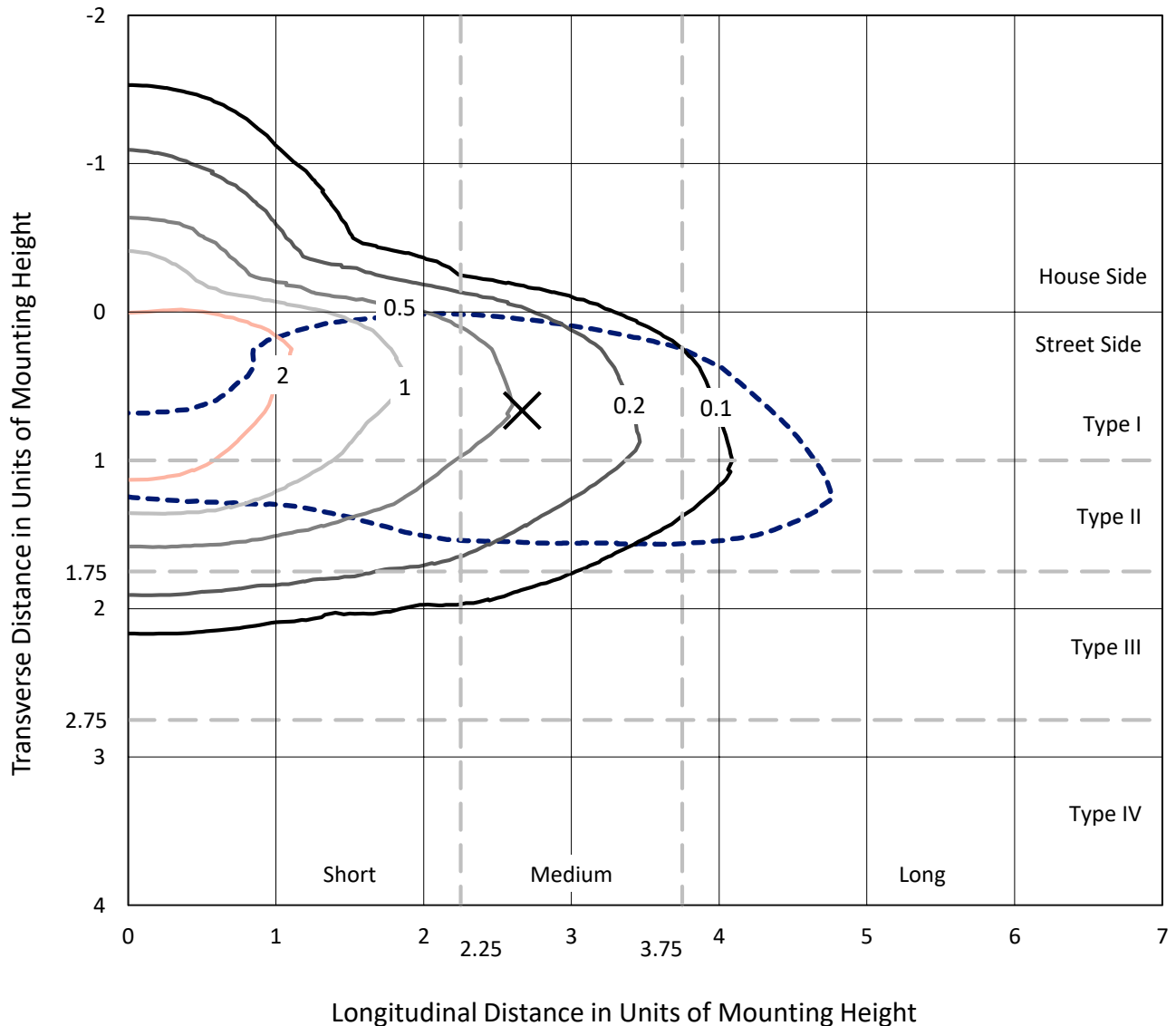
Input Watts (W): 94
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P398113
 CATALOG NUMBER: ARCH-S-PA1-90-727-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

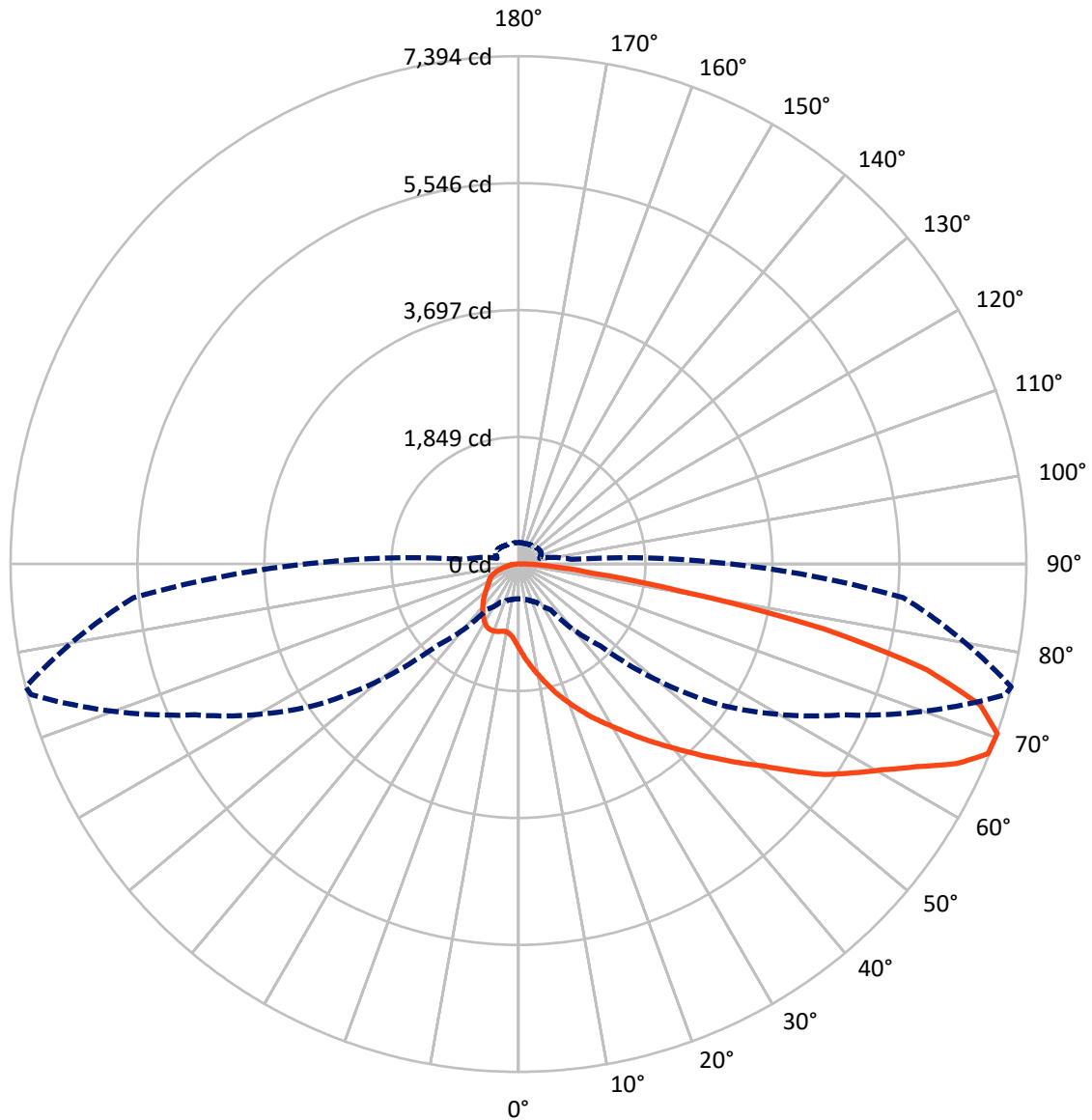
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type II - Medium - Non-Cutoff

REPORT NUMBER: P398113
CATALOG NUMBER: ARCH-S-PA1-90-727-U-T2R

Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



REPORT NUMBER: P398113

CATALOG NUMBER: ARCH-S-PA1-90-727-U-T2R

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1601.3	0.0	1601.3
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	8206.7	0.0	8206.7
	% Fixture	83.7	0.0	83.7
Total	Lumens	9808.0	0.0	9808.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.4	1.3
10°-20°	433.1	4.4
20°-30°	774.9	7.9
30°-40°	1253.6	12.8
40°-50°	1813.5	18.5
50°-60°	2075.6	21.2
60°-70°	1909.3	19.5
70°-80°	1180.7	12.0
80°-90°	239.8	2.4
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°	9808.0	100.0
0°-180°	9808.0	100.0

Coefficient of Utilization



REPORT NUMBER: P398113

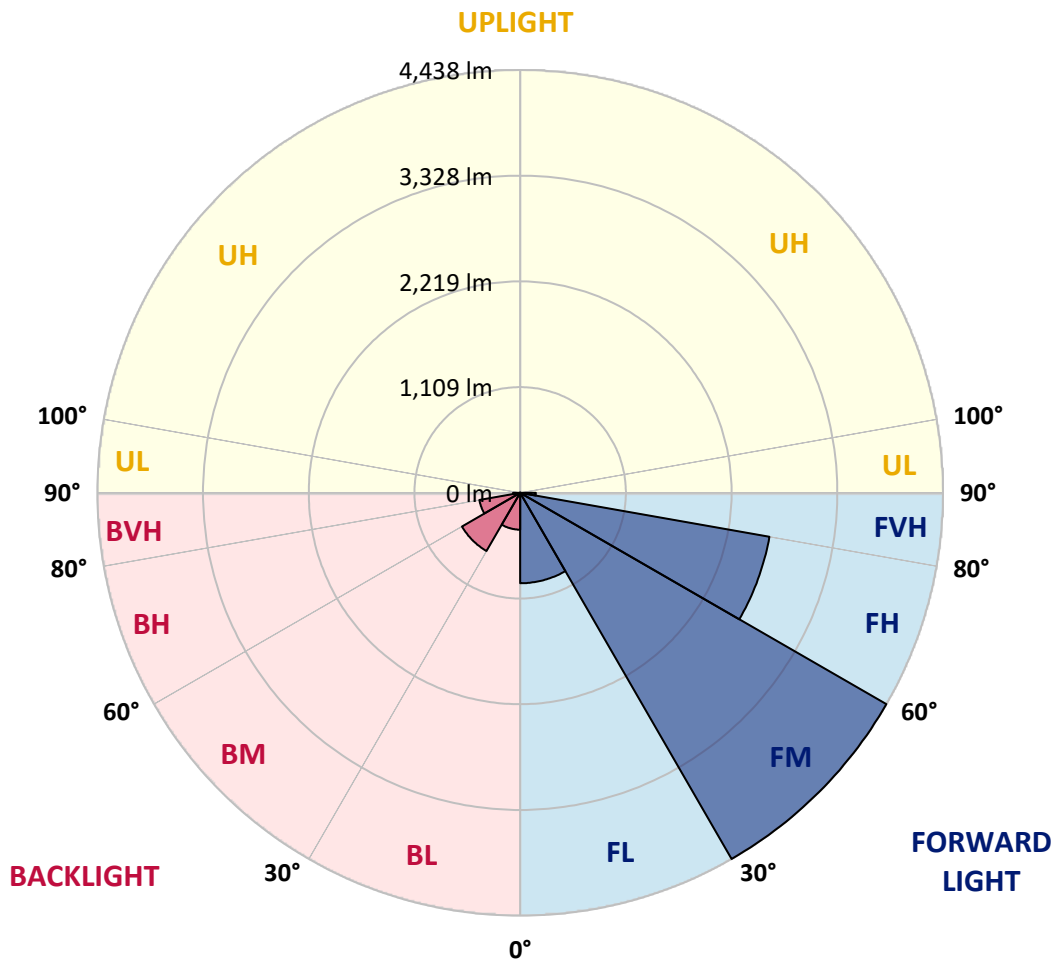
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	948.8	9.7			
FM (30°-60°)	4437.7	45.2			
FH (60°-80°)	2655.7	27.1			G2/5000
FVH (80°-90°)	164.6	1.7			G2/225
BL (0°-30°)	386.8	3.9	B1/500		
BM (30°-60°)	705.0	7.2	B1/1000		
BH (60°-80°)	434.3	4.4	B1/500		G1/500
BVH (80°-90°)	75.2	0.8			G1/100
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 Medium





REPORT NUMBER: P398113

CATALOG NUMBER: ARCH-S-PA1-90-727-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5
2.5°	1563.2	1551.5	1550.3	1532.2	1515.4	1470.3	1438.0	1381.3	1324.6	1323.3	1266.5
5°	1806.9	1795.3	1788.9	1766.9	1738.6	1679.2	1621.2	1533.5	1436.8	1430.3	1323.3
7.5°	1972.0	1961.7	1948.8	1939.8	1912.7	1859.8	1788.9	1684.4	1551.5	1538.6	1389.0
10°	2082.9	2076.5	2073.9	2067.4	2050.7	2008.1	1939.8	1828.8	1666.3	1652.1	1458.7
12.5°	2130.6	2128.1	2139.7	2157.7	2164.2	2147.4	2081.6	1977.2	1792.7	1777.2	1542.5
15°	2075.2	2077.8	2107.4	2169.3	2235.1	2271.2	2232.5	2130.6	1935.9	1914.0	1640.5
17.5°	2049.4	2053.2	2073.9	2133.2	2226.1	2338.3	2356.3	2276.4	2073.9	2042.9	1743.7
20°	2094.5	2099.7	2115.2	2161.6	2226.1	2346.0	2440.2	2415.7	2209.3	2177.1	1843.0
22.5°	2209.3	2215.8	2214.5	2244.1	2288.0	2370.5	2486.6	2547.2	2351.2	2315.1	1946.2
25°	2454.4	2449.2	2405.3	2391.2	2402.8	2455.6	2548.5	2673.6	2499.5	2463.4	2054.5
27.5°	2787.1	2780.7	2700.7	2628.5	2564.0	2587.2	2636.2	2775.5	2650.4	2609.1	2157.7
30°	3143.1	3135.3	3042.5	2925.1	2781.9	2748.4	2742.0	2864.5	2802.6	2758.7	2267.3
32.5°	3490.0	3483.6	3384.2	3247.5	3050.2	2949.6	2887.7	2963.8	2975.4	2932.8	2387.3
35°	3806.0	3806.0	3720.9	3558.4	3335.2	3183.1	3081.2	3086.3	3174.0	3125.0	2524.0
37.5°	4087.2	4085.9	3993.0	3833.1	3619.0	3444.9	3318.5	3234.6	3363.6	3321.1	2667.2
40°	4310.3	4301.2	4232.9	4093.6	3878.2	3705.4	3577.7	3408.8	3575.1	3536.4	2819.3
42.5°	4472.8	4467.6	4421.2	4300.0	4094.9	3932.4	3844.7	3628.0	3815.0	3776.3	2997.3
45°	4536.0	4546.3	4546.3	4431.5	4269.0	4120.7	4082.0	3869.2	4074.3	4035.6	3188.2
47.5°	4434.1	4461.2	4516.6	4524.4	4381.2	4280.6	4293.5	4111.7	4341.2	4320.6	3397.1
50°	4115.5	4165.8	4287.1	4506.3	4426.4	4403.1	4474.1	4359.3	4627.5	4621.1	3651.2
52.5°	3294.0	3416.5	3794.4	4187.8	4395.4	4459.9	4653.3	4637.9	4996.4	5006.7	3982.7
55°	2526.6	2573.0	3010.2	3679.6	4205.8	4441.8	4773.3	4910.0	5396.2	5409.1	4287.1
57.5°	2042.9	2073.9	2312.5	3010.2	3773.7	4343.8	4867.4	5068.6	5703.2	5736.7	4557.9
60°	1618.6	1663.8	1823.7	2303.5	3168.9	4107.8	4933.2	5245.3	6033.4	6083.7	4881.6
62.5°	1203.3	1225.2	1376.1	1706.3	2508.5	3683.5	4898.4	5437.5	6438.3	6498.9	5271.1
65°	856.4	875.7	982.8	1213.6	1854.6	3109.5	4695.9	5580.7	6946.5	7008.4	5663.2
67.5°	641.0	648.7	709.4	848.6	1249.7	2415.7	4285.8	5556.2	7317.9	7373.4	5820.5
70°	506.9	509.4	539.1	613.9	812.5	1681.8	3567.4	5196.3	7345.0	7394.0	5621.9
72.5°	420.5	419.2	435.9	472.0	566.2	1064.0	2642.7	4528.2	6996.8	7030.3	5067.3
75°	346.9	349.5	361.1	381.8	432.1	701.6	1712.8	3612.5	6172.6	6136.5	4252.2
77.5°	291.5	290.2	295.3	313.4	349.5	504.3	1003.4	2610.4	4574.7	4556.6	2791.0
80°	234.7	237.3	245.0	260.5	294.1	384.3	593.3	1628.9	2454.4	2388.6	1333.6
82.5°	157.3	181.9	197.3	215.4	254.1	283.7	376.6	828.0	1097.6	1080.8	604.9
85°	74.8	99.3	147.0	167.7	206.4	178.0	255.4	394.7	549.4	543.0	218.0
87.5°	15.5	15.5	78.7	94.2	127.7	76.1	141.9	171.5	265.7	248.9	89.0
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°	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5	1226.5
2.5°	1233.0	1198.2	1128.5	1073.1	1016.3	984.1	944.1	924.7	920.9	910.5	918.3
5°	1254.9	1186.6	1055.0	968.6	910.5	882.2	868.0	862.8	861.5	859.0	859.0
7.5°	1284.6	1180.1	1008.6	920.9	883.5	874.4	878.3	886.0	887.3	889.9	888.6
10°	1320.7	1181.4	982.8	909.3	891.2	892.5	905.4	915.7	920.9	924.7	923.4
12.5°	1371.0	1196.9	978.9	917.0	909.3	914.4	927.3	937.6	942.8	944.1	944.1
15°	1436.8	1229.1	987.9	933.8	927.3	931.2	938.9	942.8	944.1	942.8	942.8
17.5°	1509.0	1267.8	1000.8	944.1	933.8	929.9	927.3	923.4	915.7	910.5	910.5
20°	1578.6	1302.6	1007.3	942.8	924.7	909.3	893.8	874.4	861.5	851.2	851.2
22.5°	1648.3	1334.9	1007.3	928.6	900.2	870.6	838.3	807.4	788.0	775.1	775.1
25°	1721.8	1365.8	999.5	904.1	861.5	819.0	775.1	736.4	717.1	704.2	701.6
27.5°	1783.7	1383.9	978.9	869.3	813.8	759.7	709.4	669.4	655.2	643.6	643.6
30°	1849.5	1395.5	940.2	824.1	759.7	697.7	646.2	613.9	598.4	581.7	580.4
32.5°	1923.0	1403.2	896.4	776.4	704.2	638.4	594.6	568.8	535.2	517.2	514.6
35°	2008.1	1413.5	849.9	722.2	648.7	589.4	563.6	521.1	488.8	473.3	472.0
37.5°	2098.4	1421.3	799.6	674.5	598.4	557.2	531.4	481.1	452.7	429.5	426.9
40°	2193.8	1421.3	748.0	628.1	558.5	543.0	494.0	448.8	401.1	389.5	386.9
42.5°	2299.6	1418.7	696.5	583.0	521.1	510.7	472.0	424.3	399.8	389.5	386.9
45°	2411.8	1409.7	647.4	531.4	482.4	461.7	432.1	419.2	408.8	408.8	408.8
47.5°	2539.5	1401.9	592.0	484.9	454.0	430.8	408.8	401.1	399.8	403.7	407.6
50°	2703.3	1399.4	545.6	451.4	432.1	405.0	402.4	395.9	397.2	397.2	397.2
52.5°	2901.9	1376.1	501.7	426.9	410.1	377.9	385.6	392.1	394.7	393.4	392.1
55°	3047.6	1334.9	464.3	410.1	394.7	367.6	377.9	388.2	390.8	386.9	386.9
57.5°	3179.2	1276.8	434.6	397.2	384.3	361.1	372.7	383.0	380.5	379.2	377.9
60°	3330.1	1221.4	411.4	390.8	374.0	358.5	368.9	375.3	371.4	368.9	367.6
62.5°	3493.9	1167.2	394.7	390.8	366.3	357.3	365.0	367.6	359.8	357.3	357.3
65°	3570.0	1082.1	376.6	390.8	362.4	354.7	357.3	354.7	346.9	346.9	345.6
67.5°	3444.9	941.5	353.4	385.6	367.6	350.8	345.6	341.8	332.8	332.8	330.2
70°	3099.2	773.8	319.9	368.9	368.9	349.5	330.2	321.1	310.8	314.7	309.5
72.5°	2647.8	613.9	278.6	340.5	361.1	348.2	313.4	299.2	290.2	294.1	286.3
75°	2144.8	475.9	229.6	295.3	341.8	341.8	296.6	277.3	267.0	267.0	257.9
77.5°	1367.1	352.1	187.0	245.0	307.0	332.8	282.5	252.8	237.3	233.4	227.0
80°	677.1	247.6	153.5	194.7	261.8	312.1	272.1	224.4	202.5	194.7	183.1
82.5°	359.8	171.5	122.5	152.2	208.9	281.2	259.2	193.5	166.4	154.8	141.9
85°	161.2	105.8	98.0	116.1	158.6	230.9	233.4	158.6	127.7	152.2	112.2
87.5°	59.3	47.7	47.7	59.3	91.6	96.7	165.1	101.9	81.3	55.5	43.9
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)