

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: P836105

Luminaire Tested: **ARCH3-140-727-U-T4W-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836105
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-140-727-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1110mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13460 lumens
Efficiency: N/A
Efficacy: 94.5 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 142.5
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

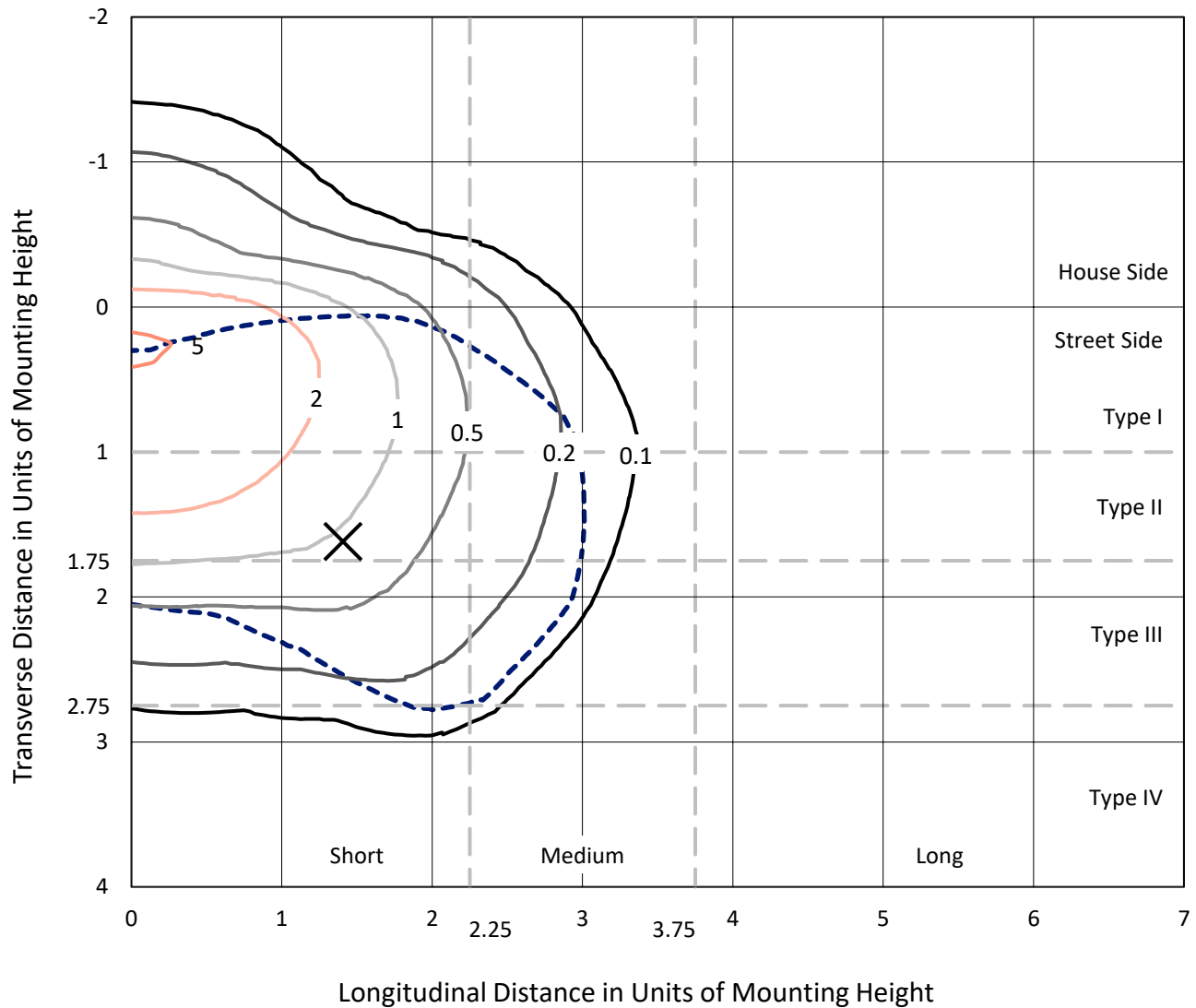


REPORT NUMBER: P836105

CATALOG NUMBER: ARCH3-140-727-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

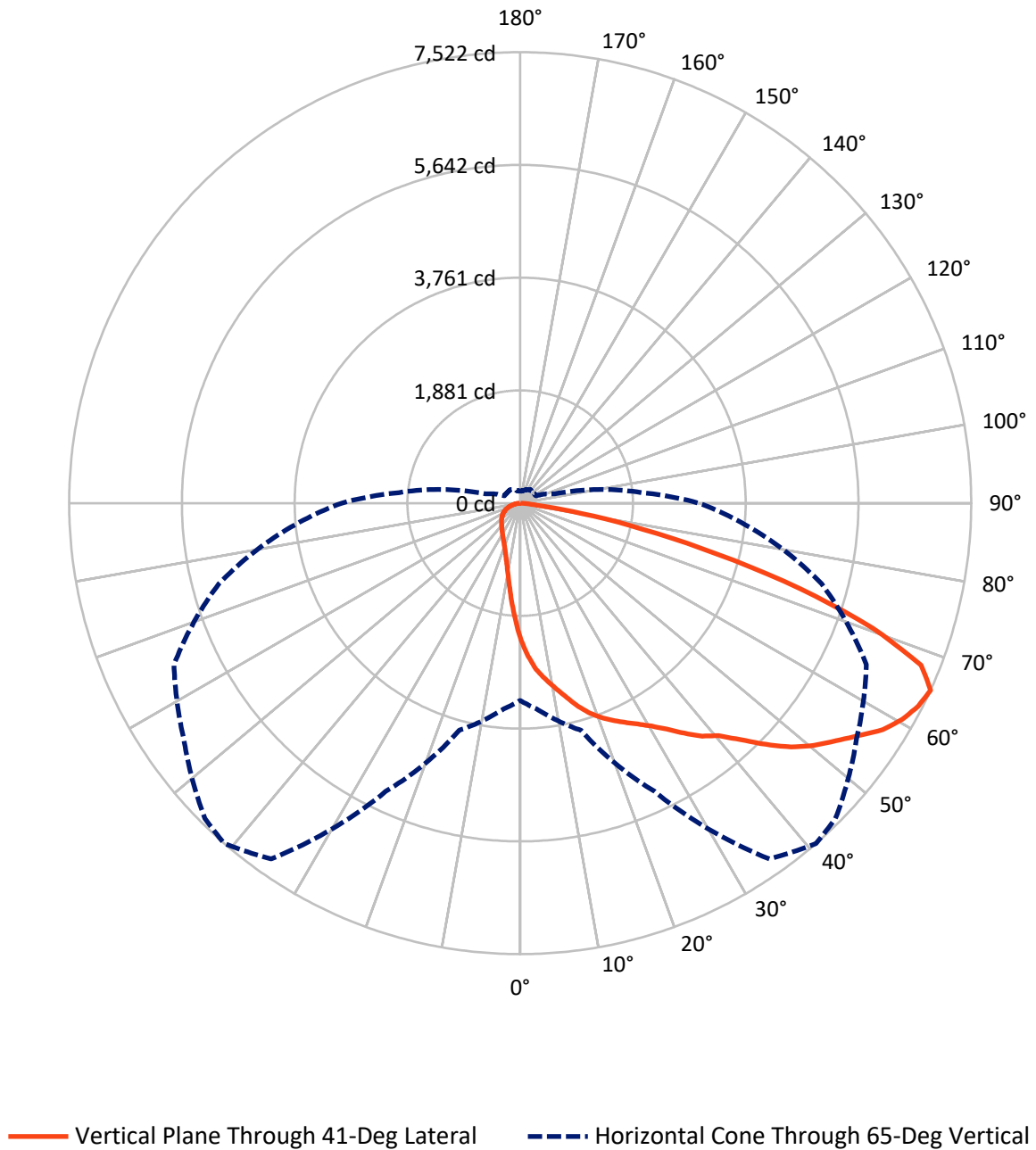
✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc
Type III - Short - N/A

REPORT NUMBER: P836105
CATALOG NUMBER: ARCH3-140-727-U-T4W-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P836105

CATALOG NUMBER: ARCH3-140-727-U-T4W-HSS

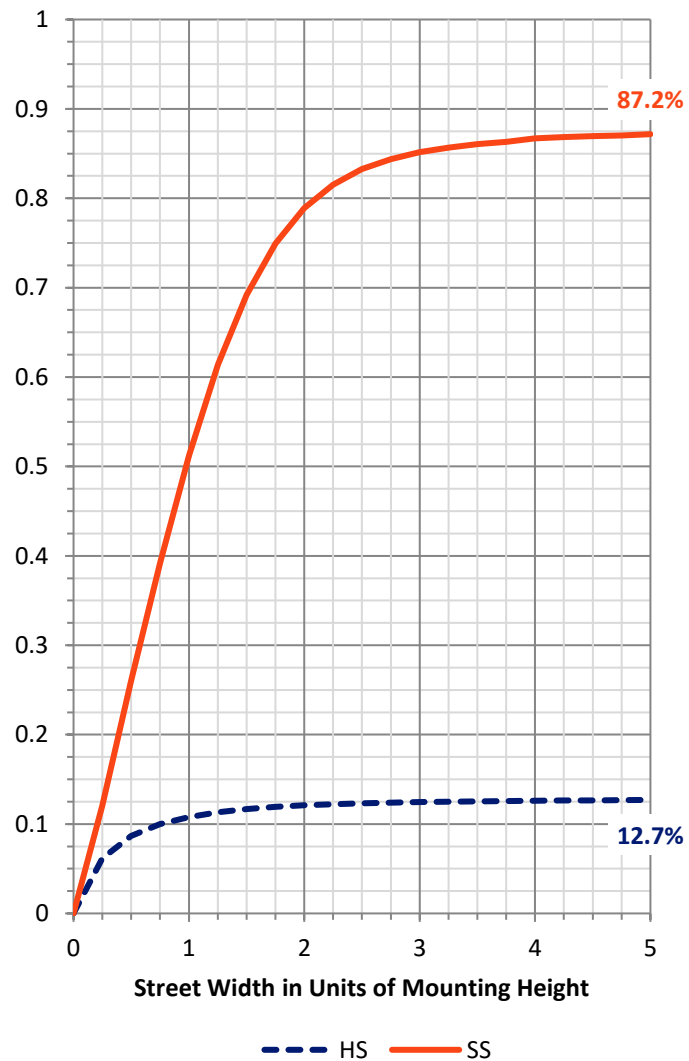
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1728.1	0.0	1728.1
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	11731.9	0.0	11731.9
	% Fixture	87.2	0.0	87.2
Total	Lumens	13460.0	0.0	13460.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.7	1.6
10°-20°	640.8	4.8
20°-30°	1102.4	8.2
30°-40°	1671.9	12.4
40°-50°	2449.4	18.2
50°-60°	3093.1	23.0
60°-70°	2900.3	21.5
70°-80°	1292.7	9.6
80°-90°	95.8	0.7
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°	13460.0	100.0
0°-180°	13460.0	100.0

Coefficient of Utilization



REPORT NUMBER: P836105

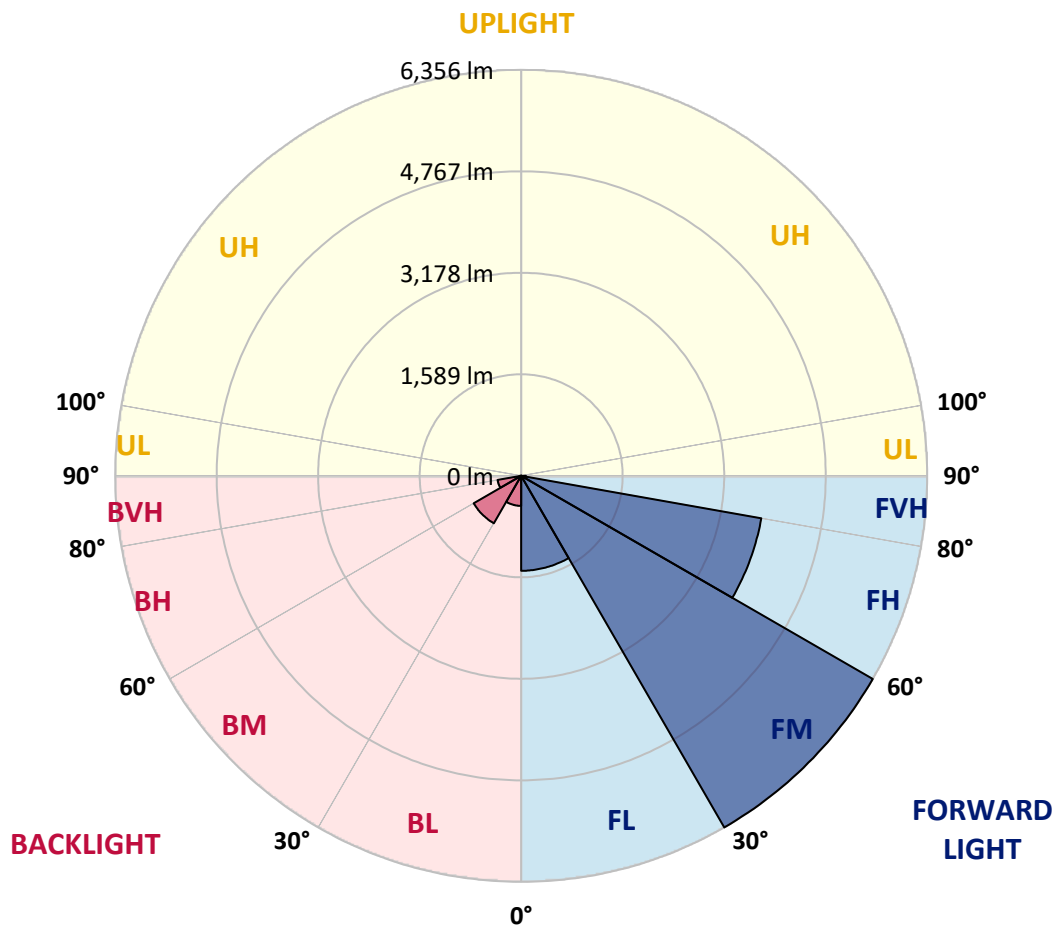
CATALOG NUMBER: ARCH3-140-727-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1486.5	11.0			
FM	(30°-60°)	6356.3	47.2			
FH	(60°-80°)	3817.6	28.4			G2/5000
FVH	(80°-90°)	71.5	0.5			G1/100
BL	(0°-30°)	470.4	3.5	B1/500		
BM	(30°-60°)	858.1	6.4	B1/1000		
BH	(60°-80°)	375.4	2.8	B1/500		G1/500
BVH	(80°-90°)	24.2	0.2			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 III Short



REPORT NUMBER: P836105

CATALOG NUMBER: ARCH3-140-727-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5
2.5°	2645.5	2637.0	2631.3	2600.1	2600.1	2557.5	2560.3	2520.6	2472.3	2395.7	2313.4
5°	2895.3	2883.9	2869.7	2838.5	2827.2	2784.6	2778.9	2722.1	2639.8	2506.4	2358.8
7.5°	3113.8	3102.5	3082.6	3037.2	3006.0	2954.9	2940.7	2866.9	2776.1	2611.4	2404.2
10°	3312.5	3304.0	3278.5	3221.7	3179.1	3116.7	3091.1	2991.8	2878.2	2696.6	2441.1
12.5°	3514.1	3502.7	3468.7	3420.4	3369.3	3295.5	3264.3	3136.6	2991.8	2790.3	2495.0
15°	3701.4	3684.4	3658.8	3607.7	3562.3	3491.4	3457.3	3306.9	3130.9	2895.3	2566.0
17.5°	3823.5	3809.3	3786.6	3758.2	3721.3	3667.4	3633.3	3485.7	3270.0	2997.5	2639.8
20°	3897.3	3891.6	3883.1	3866.0	3849.0	3812.1	3786.6	3647.5	3420.4	3096.8	2710.8
22.5°	3954.0	3948.4	3945.5	3945.5	3948.4	3934.2	3917.1	3797.9	3565.2	3201.8	2776.1
25°	4042.0	4039.2	4033.5	4027.8	4047.7	4050.5	4044.9	3962.6	3746.8	3340.9	2858.4
27.5°	4164.1	4155.6	4144.2	4138.5	4158.4	4172.6	4184.0	4127.2	3939.8	3482.8	2952.0
30°	4351.4	4325.9	4297.5	4277.6	4291.8	4314.5	4340.1	4306.0	4138.5	3658.8	3048.6
32.5°	4572.8	4541.6	4476.3	4439.4	4476.3	4493.4	4513.2	4496.2	4345.8	3849.0	3145.1
35°	4842.5	4805.6	4737.5	4683.5	4748.8	4711.9	4703.4	4686.4	4541.6	4036.4	3252.9
37.5°	5291.0	5237.0	5129.2	5010.0	5010.0	4930.5	4899.3	4848.2	4717.6	4203.8	3358.0
40°	5810.4	5739.5	5600.4	5424.4	5262.6	5098.0	5078.1	5041.2	4924.8	4396.8	3477.2
42.5°	6381.0	6244.7	6051.7	5838.8	5577.7	5390.3	5344.9	5239.9	5126.3	4592.7	3596.4
45°	7014.0	6730.1	6449.1	6341.2	5909.8	5739.5	5654.3	5464.1	5336.4	4797.1	3721.3
47.5°	7116.1	6894.7	6707.4	6690.4	6219.2	6077.2	5980.7	5708.2	5563.5	5015.6	3851.9
50°	7059.4	6926.0	6945.8	6877.7	6446.2	6352.6	6278.8	5969.4	5787.7	5225.7	3971.1
52.5°	6820.9	6894.7	7008.3	6883.4	6662.0	6585.3	6548.4	6250.4	5997.8	5418.7	4078.9
55°	6537.1	6588.2	6832.3	6985.6	6911.8	6843.6	6809.6	6576.8	6205.0	5580.5	4178.3
57.5°	6122.7	6100.0	6369.6	6968.5	7172.9	7133.2	7096.3	6897.6	6398.0	5696.9	4240.7
60°	5501.0	5452.8	5793.4	6627.9	7258.1	7320.5	7303.5	7110.5	6545.6	5694.0	4215.2
62.5°	4425.2	4544.4	5015.6	6071.6	7295.0	7453.9	7422.7	7127.5	6593.9	5529.4	4053.4
65°	3289.8	3460.1	3922.8	5305.2	7243.9	7522.0	7436.9	6849.3	6369.6	5203.0	3698.6
67.5°	2370.2	2520.6	2858.4	4365.6	6752.8	7209.8	7110.5	6395.2	5853.0	4740.3	3207.5
70°	1620.8	1728.7	1958.6	3179.1	5765.0	6233.4	6170.9	5716.8	5038.3	4189.6	2605.7
72.5°	1143.9	1189.3	1336.9	2097.7	4379.8	4890.7	4816.9	4703.4	4047.7	3482.8	2026.7
75°	857.2	885.6	965.1	1356.8	2954.9	3389.2	3321.1	3386.3	3023.0	2637.0	1476.0
77.5°	323.6	352.0	547.8	865.7	1748.5	2080.6	2012.5	2052.2	1680.4	1331.3	735.2
80°	88.0	93.7	181.7	411.6	794.8	1036.1	942.4	809.0	624.5	613.1	388.9
82.5°	36.9	42.6	82.3	221.4	283.9	283.9	238.4	295.2	238.4	286.7	187.3
85°	14.2	17.0	19.9	56.8	36.9	39.7	42.6	56.8	48.3	59.6	42.6
87.5°	0.0	0.0	0.0	2.8	2.8	5.7	2.8	5.7	8.5	8.5	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

REPORT NUMBER: P836105

CATALOG NUMBER: ARCH3-140-727-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5	2293.5
2.5°	2279.3	2248.1	2202.7	2128.9	2052.2	2009.7	1955.7	1947.2	1890.4	1884.8	1862.1
5°	2293.5	2228.2	2111.8	1969.9	1830.8	1723.0	1643.5	1600.9	1518.6	1518.6	1495.9
7.5°	2304.9	2202.7	2015.3	1805.3	1615.1	1470.3	1362.5	1317.1	1243.3	1237.6	1220.6
10°	2307.7	2171.5	1910.3	1637.8	1405.1	1257.5	1152.4	1101.3	1036.1	1030.4	1019.0
12.5°	2330.4	2154.4	1816.6	1493.1	1254.6	1095.7	993.5	950.9	899.8	894.1	882.8
15°	2367.3	2154.4	1737.2	1371.0	1121.2	973.6	885.6	845.9	809.0	803.3	797.6
17.5°	2404.2	2148.7	1657.7	1257.5	1010.5	877.1	800.5	769.2	740.9	738.0	732.3
20°	2438.3	2145.9	1578.2	1160.9	925.4	797.6	738.0	709.6	686.9	686.9	684.1
22.5°	2472.3	2140.2	1501.6	1070.1	851.6	738.0	686.9	655.7	638.7	638.7	635.8
25°	2523.4	2140.2	1430.6	993.5	791.9	692.6	641.5	618.8	604.6	601.8	601.8
27.5°	2583.0	2157.3	1368.2	925.4	740.9	647.2	607.4	584.7	567.7	562.0	564.9
30°	2648.3	2171.5	1311.4	865.7	692.6	613.1	570.5	547.8	530.8	525.1	528.0
32.5°	2713.6	2188.5	1260.3	811.8	644.3	581.9	539.3	513.8	496.7	493.9	493.9
35°	2784.6	2205.5	1209.2	766.4	604.6	550.7	510.9	482.5	471.2	465.5	468.4
37.5°	2855.5	2233.9	1160.9	723.8	576.2	522.3	485.4	457.0	448.5	445.6	445.6
40°	2940.7	2276.5	1141.1	695.4	550.7	496.7	465.5	437.1	428.6	428.6	428.6
42.5°	3011.7	2310.5	1124.0	664.2	530.8	474.0	445.6	422.9	417.3	414.4	417.3
45°	3082.6	2341.8	1101.3	635.8	505.3	451.3	428.6	405.9	400.2	400.2	400.2
47.5°	3153.6	2358.8	1070.1	607.4	482.5	431.5	411.6	391.7	386.0	386.0	386.0
50°	3210.4	2373.0	1024.7	576.2	457.0	414.4	394.6	374.7	369.0	369.0	369.0
52.5°	3267.1	2375.8	976.4	539.3	431.5	394.6	377.5	357.7	352.0	349.1	349.1
55°	3318.2	2373.0	919.7	496.7	403.1	371.8	357.7	340.6	329.3	317.9	323.6
57.5°	3355.1	2370.2	854.4	454.2	374.7	349.1	343.5	320.8	298.0	269.7	275.3
60°	3340.9	2338.9	783.4	400.2	343.5	326.4	326.4	295.2	255.5	241.3	244.1
62.5°	3250.1	2250.9	709.6	343.5	312.2	303.7	300.9	266.8	235.6	221.4	224.2
65°	2977.6	2029.5	601.8	292.4	281.0	278.2	278.2	247.0	218.6	201.5	204.4
67.5°	2563.2	1703.1	491.1	247.0	249.8	255.5	255.5	227.1	198.7	181.7	184.5
70°	2055.1	1331.3	391.7	212.9	215.7	224.2	229.9	204.4	178.8	161.8	161.8
72.5°	1547.0	1010.5	315.1	178.8	193.0	193.0	201.5	181.7	156.1	139.1	141.9
75°	1121.2	723.8	249.8	150.4	167.5	164.6	164.6	153.3	133.4	122.1	122.1
77.5°	530.8	380.4	198.7	107.9	130.6	127.7	130.6	122.1	113.5	102.2	105.0
80°	261.1	187.3	127.7	76.6	90.8	93.7	102.2	96.5	93.7	85.2	85.2
82.5°	124.9	73.8	59.6	53.9	62.4	65.3	71.0	71.0	73.8	68.1	68.1
85°	34.1	19.9	25.5	34.1	39.7	42.6	48.3	51.1	51.1	48.3	51.1
87.5°	8.5	8.5	11.4	17.0	19.9	22.7	25.5	25.5	11.4	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)