

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: LUMARK

Report Number: P967658

Luminaire Tested: **NAV-SB5A-727-U-SL3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967658
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-13)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-727-U-SL3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17349.2 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G3

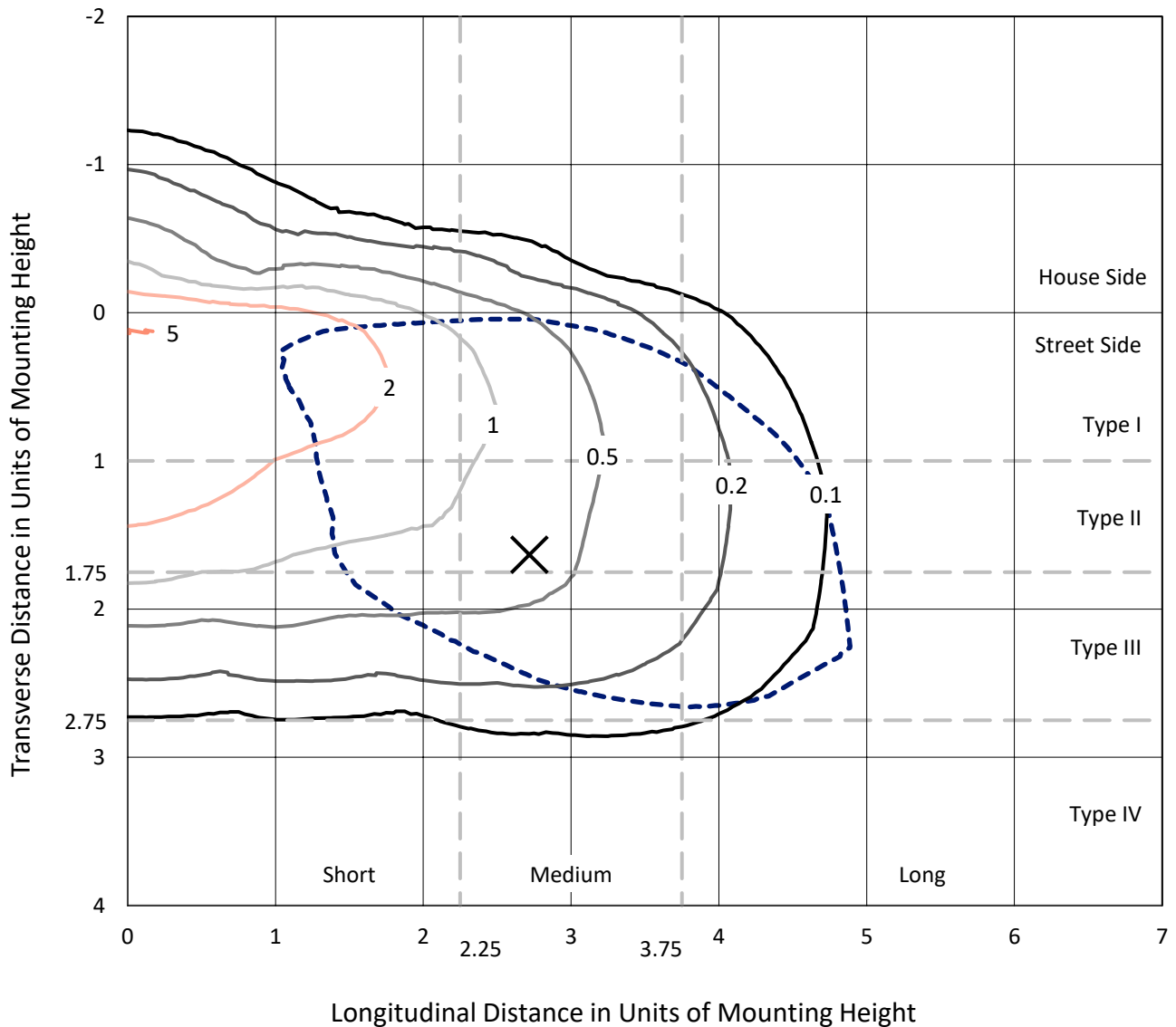
Input Watts (W): 141.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P967658
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Iso-Footcandle Lines of Horizontal Illumination

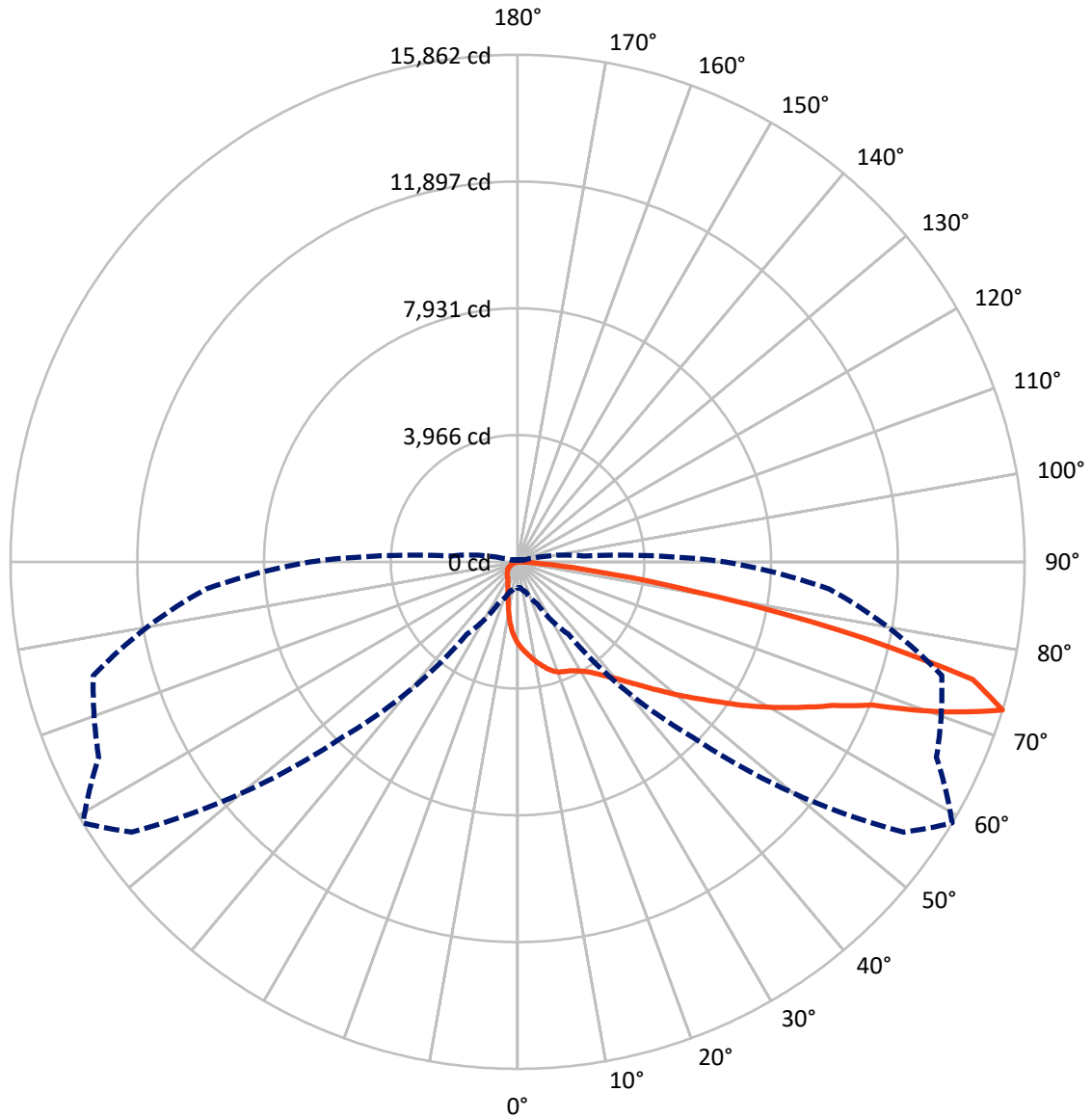
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
 Type III - Medium - N/A

REPORT NUMBER: P967658
CATALOG NUMBER: NAV-SB5A-727-U-SL3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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 CATALOG NUMBER: NAV-SB5A-727-U-SL3-HSS

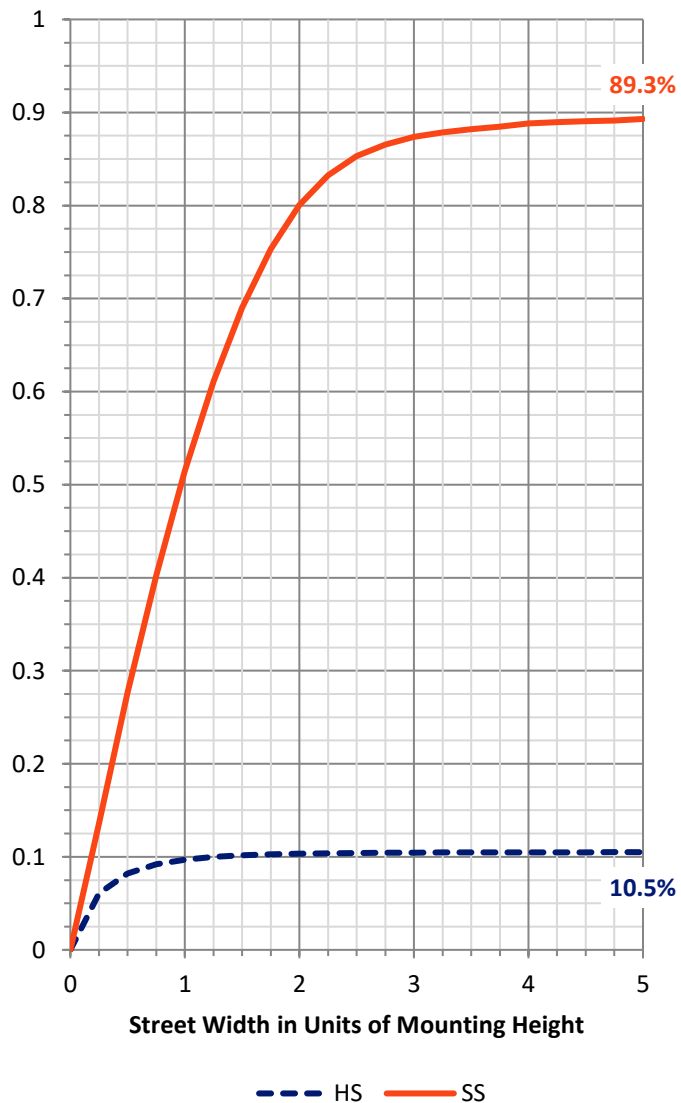
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1832.4	0.0	1832.4
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	15516.7	0.0	15516.7
	% Fixture	89.4	0.0	89.4
Total	Lumens	17349.2	0.0	17349.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.1	1.3
10°-20°	616.5	3.6
20°-30°	977.1	5.6
30°-40°	1568.1	9.0
40°-50°	2504.5	14.4
50°-60°	3626.2	20.9
60°-70°	4303.4	24.8
70°-80°	3194.6	18.4
80°-90°	326.6	1.9
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°	17349.2	100.0
0°-180°	17349.2	100.0

Coefficient of Utilization

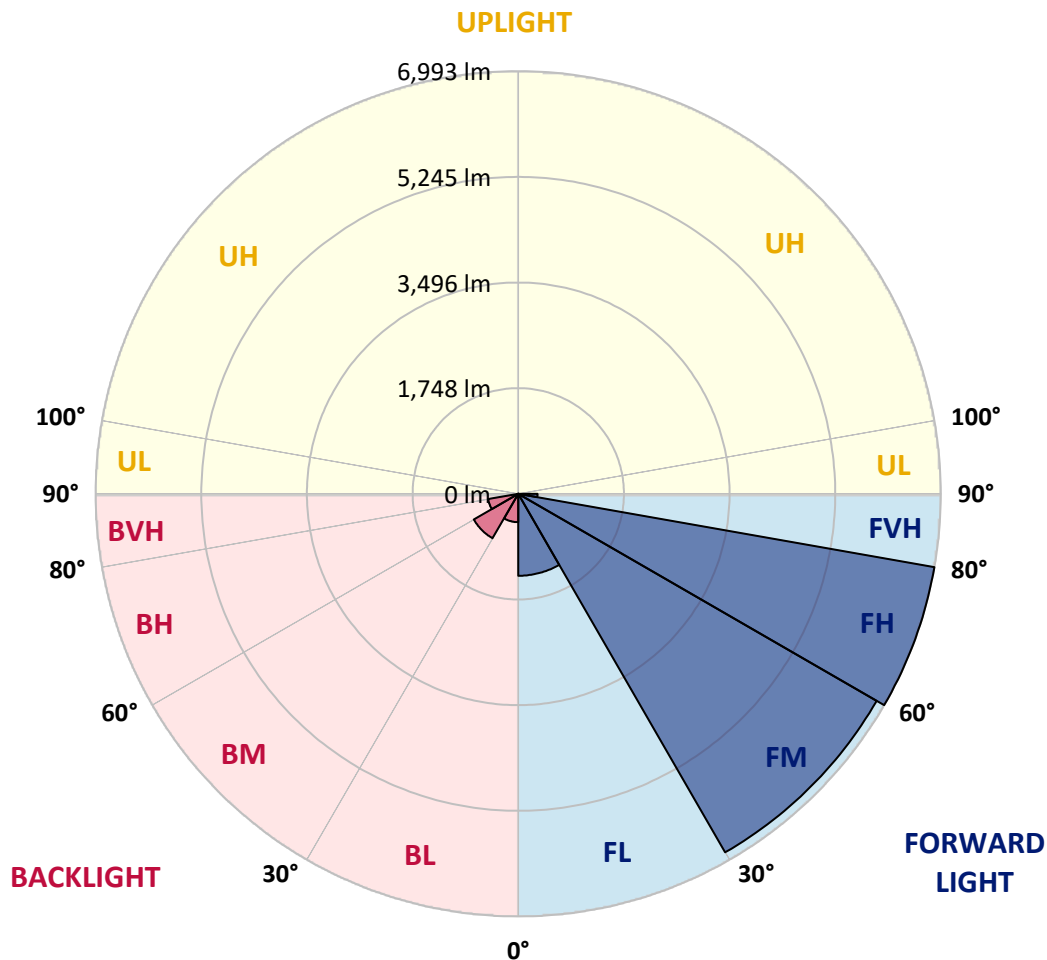


REPORT NUMBER: P967658
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1356.3	7.8			
FM (30°-60°)	6849.2	39.5			
FH (60°-80°)	6992.7	40.3			G3/7500
FVH (80°-90°)	318.5	1.8			G3/500
BL (0°-30°)	469.4	2.7	B1/500		
BM (30°-60°)	849.6	4.9	B1/1000		
BH (60°-80°)	505.3	2.9	B2/1000		G2/1000
BVH (80°-90°)	8.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3
 Type III Medium



REPORT NUMBER: P967658
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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	2565.6	2565.6	2565.6	2565.6	2565.6	2565.6	2565.6	2565.6	2565.6	2565.6	2565.6
2.5°	2846.4	2830.5	2832.8	2805.6	2786.4	2766.0	2726.4	2720.7	2692.4	2642.6	2591.6
5°	3094.5	3084.3	3075.2	3044.7	3005.0	2955.2	2888.3	2864.6	2812.5	2726.4	2626.7
7.5°	3275.7	3263.3	3267.8	3237.3	3205.5	3150.0	3058.3	3014.1	2944.9	2813.6	2663.0
10°	3310.9	3304.0	3333.5	3344.8	3344.8	3309.7	3220.2	3176.1	3075.2	2907.6	2700.4
12.5°	3113.7	3114.9	3188.5	3276.8	3392.3	3425.2	3365.2	3317.6	3218.0	3007.2	2747.9
15°	2883.8	2885.0	2956.3	3069.6	3258.7	3447.9	3495.5	3464.9	3361.8	3114.9	2803.4
17.5°	2745.7	2739.9	2787.5	2880.5	3078.6	3344.8	3574.8	3595.1	3511.3	3233.8	2864.6
20°	2726.4	2716.1	2741.1	2787.5	2929.1	3215.7	3583.8	3680.1	3665.4	3368.6	2934.8
22.5°	2844.2	2828.3	2814.8	2817.0	2877.0	3108.1	3561.2	3727.6	3824.0	3530.6	3031.0
25°	3077.5	3052.6	3008.4	2951.8	2939.3	3085.5	3545.3	3779.8	3971.2	3737.9	3157.9
27.5°	3362.9	3327.9	3242.9	3157.9	3085.5	3148.9	3578.2	3862.4	4137.7	3979.2	3305.2
30°	3676.7	3633.6	3548.7	3387.8	3272.3	3290.5	3656.3	3971.2	4350.6	4252.1	3489.8
32.5°	4137.7	4038.0	3889.7	3643.9	3490.9	3443.4	3774.0	4109.3	4614.5	4615.7	3757.1
35°	4533.0	4477.5	4328.0	4022.2	3708.4	3646.1	3929.2	4304.2	4980.4	5097.1	4130.9
37.5°	4792.4	4716.5	4585.1	4355.1	4046.0	3854.5	4136.6	4543.2	5367.8	5645.3	4591.9
40°	5082.4	5007.6	4833.2	4616.8	4437.8	4212.4	4398.2	4818.4	5792.6	6208.2	5118.5
42.5°	5432.3	5334.9	5128.8	4895.5	4708.5	4683.6	4740.3	5161.6	6228.6	6819.8	5666.8
45°	5843.5	5751.8	5515.0	5220.5	5056.3	5012.1	5170.7	5561.4	6714.6	7490.4	6220.7
47.5°	6228.6	6122.1	5867.3	5598.9	5416.5	5277.2	5628.3	6033.8	7265.0	8191.6	6744.0
50°	6556.0	6447.2	6213.9	5927.4	5803.9	5621.5	6077.9	6560.5	7811.0	8904.0	7221.9
52.5°	6780.3	6683.9	6409.8	6215.0	6131.2	6039.5	6604.7	7118.9	8354.7	9556.5	7694.3
55°	6729.2	6643.2	6401.9	6388.3	6382.7	6478.9	7234.4	7752.1	8908.6	10173.7	8164.3
57.5°	6567.3	6469.9	6168.6	6375.9	6576.4	6870.9	7916.3	8500.7	9515.7	10755.9	8617.5
60°	6090.4	6056.4	5872.9	6352.1	6657.9	7254.8	8695.6	9252.9	10172.6	11267.9	9019.6
62.5°	5081.2	5110.6	5109.5	6401.9	6805.2	7692.0	9403.6	10014.0	10814.9	11760.6	9377.5
65°	3804.7	3906.6	4036.9	5953.4	7002.3	8472.4	10249.7	10839.8	11467.3	12333.8	9741.1
67.5°	2556.5	2638.0	2726.4	4884.1	6415.5	9292.5	11655.3	11971.3	12248.9	12969.2	10150.0
70°	1463.4	1489.4	1612.9	3050.3	4945.3	9066.0	13944.4	14058.9	13414.4	13751.9	10447.8
72.5°	820.1	811.0	974.1	1447.6	2763.7	7763.5	14746.4	15862.1	14457.5	13739.4	9783.0
75°	548.2	549.4	670.6	913.0	1077.2	5434.7	12707.5	14707.9	13832.3	12183.2	7993.4
77.5°	373.8	386.2	492.7	705.6	498.4	2651.6	8406.7	10302.9	11198.8	9408.1	5518.4
80°	162.0	163.1	325.1	506.4	336.4	843.9	4358.6	5519.5	7023.8	5282.8	2186.1
82.5°	83.8	95.1	207.3	327.4	211.8	295.6	2059.2	2411.5	2947.3	1550.6	448.5
85°	29.4	35.2	128.0	160.8	106.5	105.4	717.0	730.6	624.1	233.3	123.5
87.5°	0.0	5.6	49.8	39.7	13.6	12.5	85.0	71.3	56.7	32.8	40.8
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: P967658
 CATALOG NUMBER: NAV-SB5A-727-U-SL3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2565.6	2565.6	2565.6	2565.6	2565.6	2565.6	2565.6	2565.6	2565.6	2565.6	2565.6
2.5°	2567.8	2537.2	2487.4	2426.2	2354.8	2316.3	2260.8	2226.8	2196.3	2197.4	2222.3
5°	2571.2	2520.2	2393.4	2258.6	2109.0	1999.2	1876.9	1790.8	1725.1	1709.2	1733.0
7.5°	2581.4	2495.3	2288.0	2063.7	1814.6	1630.0	1461.1	1354.6	1294.7	1278.8	1294.7
10°	2595.0	2468.1	2169.1	1825.9	1516.7	1294.7	1154.3	1086.2	1059.0	1038.6	1051.1
12.5°	2606.3	2439.8	2019.6	1580.1	1251.6	1078.3	971.8	915.2	891.4	876.7	884.6
15°	2625.5	2402.4	1857.6	1351.3	1072.7	931.1	830.2	788.3	781.6	783.8	787.2
17.5°	2644.8	2366.2	1676.4	1172.3	941.3	802.0	740.8	734.0	743.0	752.1	755.5
20°	2666.3	2314.0	1492.9	1037.5	820.1	712.5	696.6	701.1	705.6	721.5	726.0
22.5°	2698.0	2248.3	1332.0	923.1	719.2	669.4	661.5	664.9	668.3	684.2	688.7
25°	2743.3	2178.1	1201.8	817.8	655.8	634.3	626.4	626.4	630.9	645.6	651.3
27.5°	2791.0	2078.5	1096.4	720.4	618.5	595.8	582.2	582.2	587.8	604.9	611.6
30°	2844.2	1987.9	1013.7	647.9	586.7	557.3	539.2	534.6	541.4	562.9	568.6
32.5°	2940.4	1928.9	954.9	613.9	558.4	522.1	497.2	484.8	491.6	516.5	523.3
35°	3086.6	1915.3	914.1	597.0	531.3	490.5	455.3	436.0	441.8	467.8	475.7
37.5°	3257.6	1943.7	874.4	574.3	505.2	459.9	413.4	388.5	397.6	421.4	428.1
40°	3503.3	2061.5	843.9	557.3	479.1	423.6	371.6	346.6	361.3	381.7	385.1
42.5°	3800.2	2271.0	835.9	541.4	447.4	385.1	333.0	314.9	326.3	345.4	348.9
45°	4168.3	2538.3	872.2	521.0	412.3	347.8	302.4	292.2	295.6	314.9	323.9
47.5°	4563.6	2812.5	971.8	502.9	381.7	317.1	278.6	269.6	267.3	285.5	296.7
50°	4963.5	3055.9	1089.7	489.3	360.2	292.2	260.6	249.2	243.5	254.8	259.4
52.5°	5358.7	3249.7	1166.7	466.7	338.7	267.3	244.7	227.7	217.5	223.1	227.7
55°	5759.7	3419.6	1171.2	432.7	318.3	251.4	228.8	209.5	197.1	197.1	199.4
57.5°	6134.6	3569.0	1104.3	387.3	290.0	236.8	207.3	191.5	177.8	173.3	174.5
60°	6466.5	3680.1	993.3	336.4	265.1	217.5	185.7	173.3	156.3	147.3	144.9
62.5°	6762.1	3734.5	841.6	284.3	234.4	194.9	165.3	151.8	129.1	117.8	116.6
65°	7012.4	3678.9	683.0	235.6	208.4	169.9	141.6	128.0	103.1	89.5	89.5
67.5°	7260.5	3425.2	516.5	198.2	181.2	142.7	116.6	104.2	86.1	74.7	74.7
70°	7292.3	2891.7	361.3	166.5	150.7	109.9	94.0	86.1	70.2	60.1	58.9
72.5°	6491.4	2080.8	219.8	135.9	117.8	78.1	74.7	68.0	52.1	45.3	44.2
75°	5188.9	1275.4	129.1	102.0	78.1	55.5	55.5	48.7	35.2	29.4	29.4
77.5°	3586.1	667.2	75.8	65.7	46.4	32.8	36.3	29.4	17.0	13.6	13.6
80°	1436.2	253.7	40.8	30.5	21.5	14.8	12.5	6.8	3.4	2.3	3.4
82.5°	286.6	66.8	13.6	7.9	7.9	3.4	0.0	0.0	0.0	0.0	0.0
85°	73.6	14.8	3.4	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	22.7	0.0	0.0	0.0	0.0	0.0	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)