

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: P884419

Luminaire Tested: **NAV-SB5B-722-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884419
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-722-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22785 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

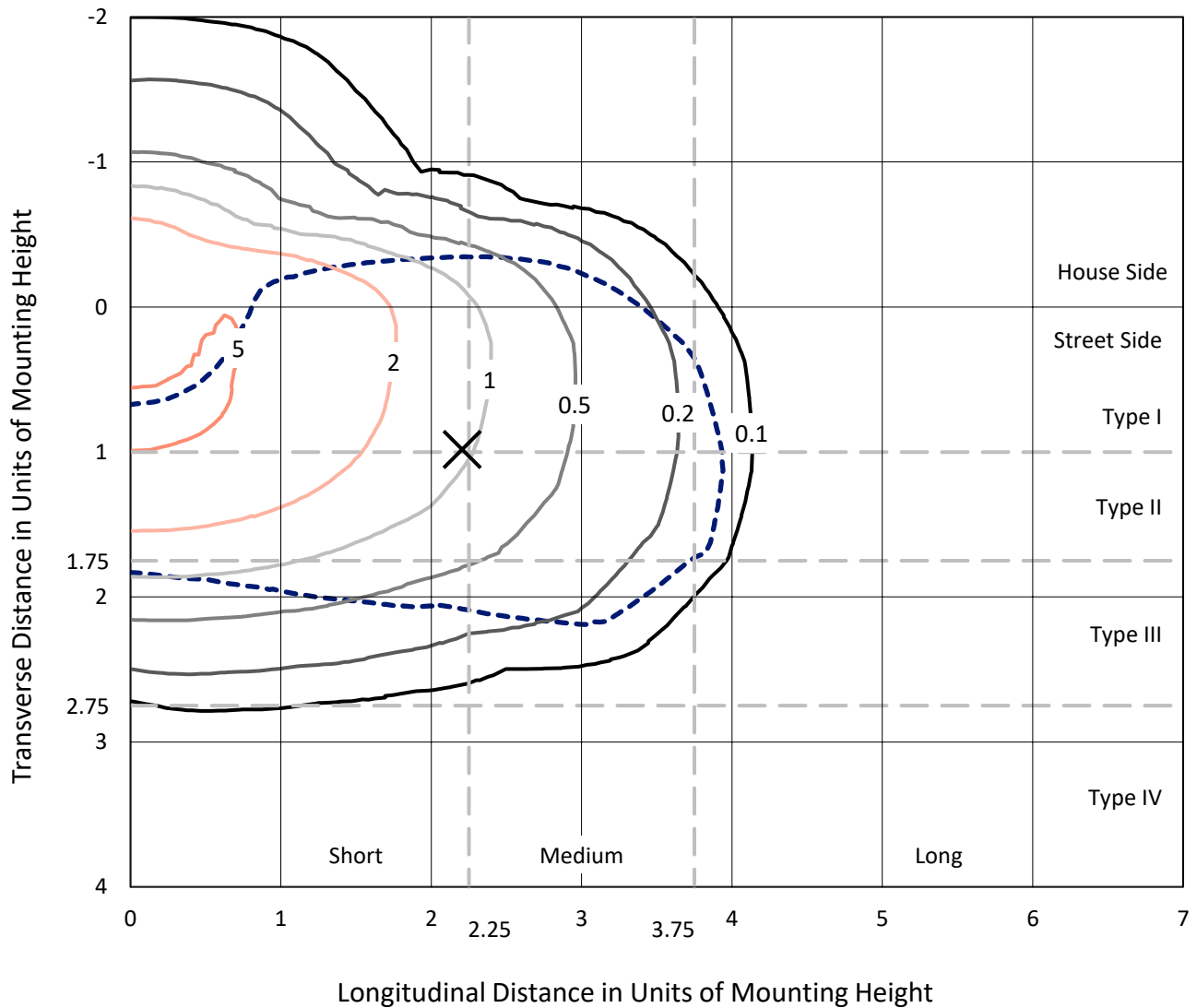
Input Watts (W): 182.7
Input Voltage (V): 120.0
Input Current (Ain): 1.547
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 11.125
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

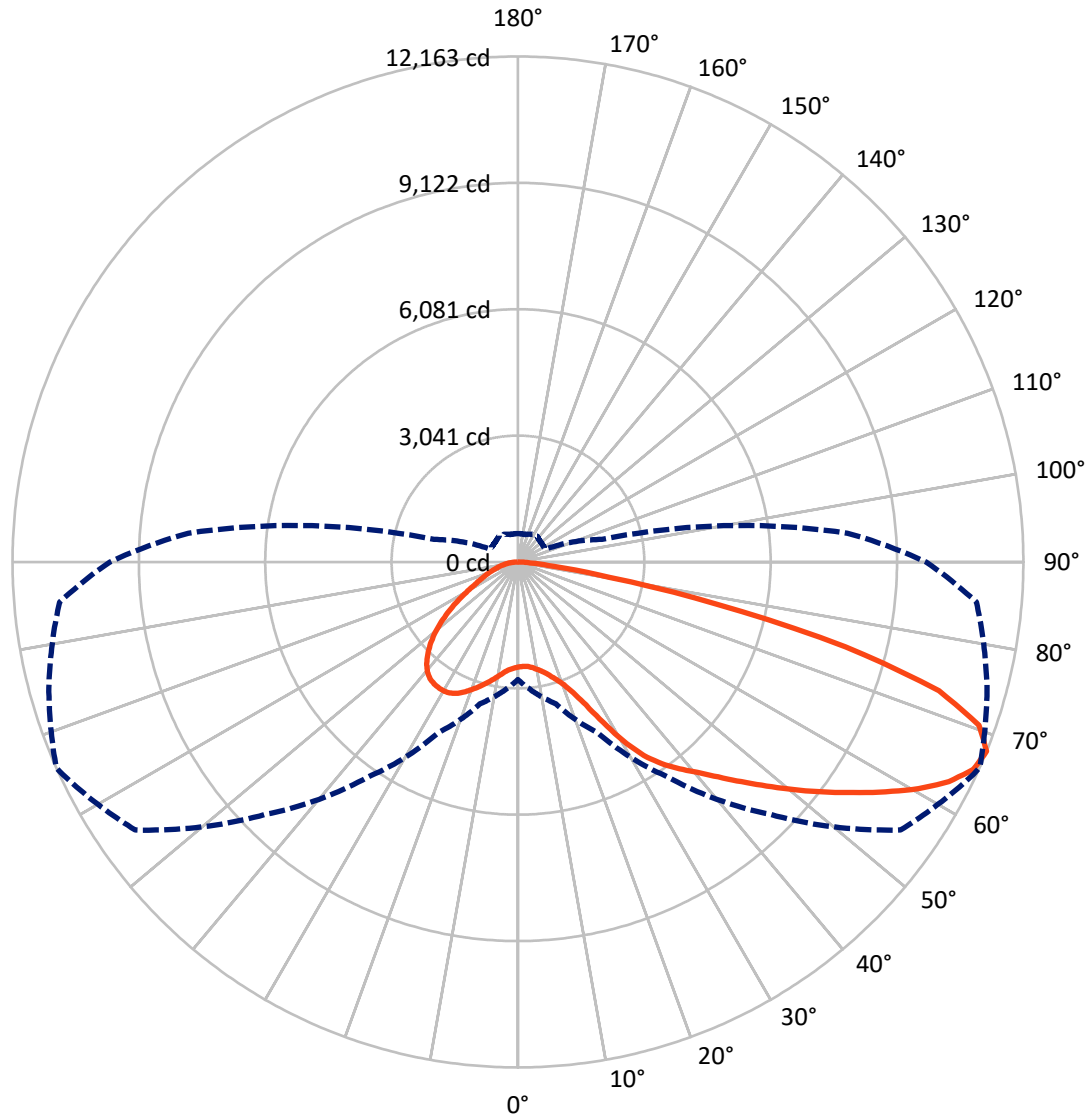
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
 Type III - Short - N/A

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CATALOG NUMBER: NAV-SB5B-722-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5665.4	0.0	5665.4
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	17119.6	0.0	17119.6
	% Fixture	75.1	0.0	75.1
Total	Lumens	22785.0	0.0	22785.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.6	1.1
10°-20°	827.8	3.6
20°-30°	1595.6	7.0
30°-40°	2797.6	12.3
40°-50°	4159.1	18.3
50°-60°	5272.1	23.1
60°-70°	5158.6	22.6
70°-80°	2460.7	10.8
80°-90°	263.0	1.2
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°	22785.0	100.0
0°-180°	22785.0	100.0

Coefficient of Utilization



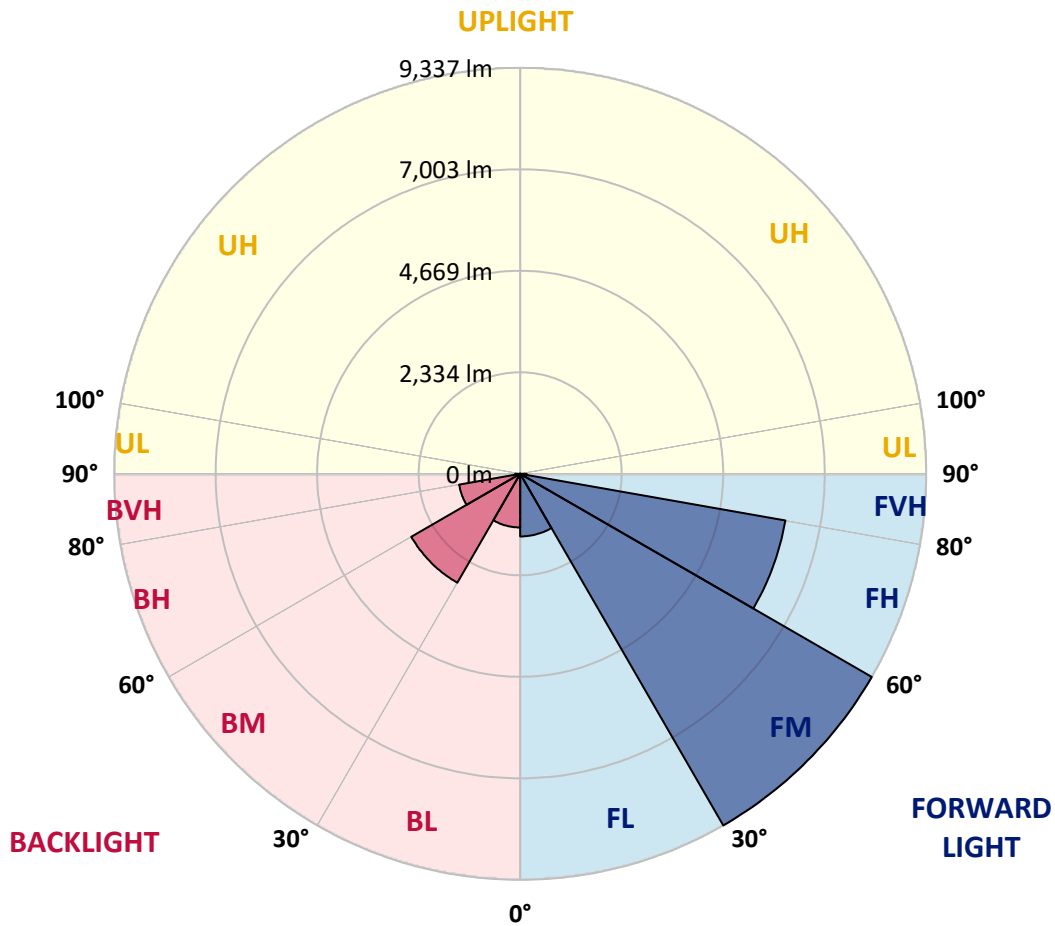
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1439.8	6.3			
FM (30°-60°)	9337.1	41.0			
FH (60°-80°)	6193.6	27.2			G3/7500
FVH (80°-90°)	149.1	0.7			G2/225
BL (0°-30°)	1234.1	5.4	B3/2500		
BM (30°-60°)	2891.7	12.7	B3/5000		
BH (60°-80°)	1425.7	6.3	B3/2500		G3/2500
BVH (80°-90°)	113.9	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short



REPORT NUMBER: P884419
 CATALOG NUMBER: NAV-SB5B-722-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2527.2	2527.2	2527.2	2527.2	2527.2	2527.2	2527.2	2527.2	2527.2	2527.2	2527.2
2.5°	2500.8	2515.2	2511.6	2505.6	2504.4	2506.8	2510.4	2514.0	2512.8	2518.8	2528.4
5°	2493.6	2508.0	2506.8	2506.8	2511.6	2521.2	2527.2	2533.1	2527.2	2534.3	2547.5
7.5°	2498.4	2509.2	2514.0	2518.8	2530.7	2548.7	2563.1	2576.2	2569.1	2577.4	2594.2
10°	2559.5	2567.9	2572.6	2572.6	2581.0	2601.4	2615.7	2639.7	2633.7	2646.9	2668.4
12.5°	2670.8	2679.2	2679.2	2674.4	2680.4	2693.6	2698.3	2724.7	2713.9	2735.5	2757.0
15°	2807.3	2824.0	2810.9	2802.5	2804.9	2818.1	2816.9	2837.2	2826.4	2844.4	2863.6
17.5°	2958.1	2979.7	2958.1	2956.9	2952.1	2966.5	2967.7	2985.7	2966.5	2979.7	2992.8
20°	3136.5	3166.4	3148.5	3154.5	3143.7	3149.7	3155.7	3182.0	3152.1	3161.6	3158.0
22.5°	3387.9	3423.8	3404.7	3427.4	3420.2	3415.4	3414.2	3460.9	3414.2	3417.8	3383.1
25°	3754.2	3797.3	3763.8	3794.9	3794.9	3810.5	3828.4	3888.3	3810.5	3787.7	3698.0
27.5°	4295.3	4338.4	4272.6	4291.7	4285.8	4324.1	4304.9	4453.4	4369.6	4332.4	4151.7
30°	4946.6	5023.2	4898.7	4893.9	4887.9	4949.0	4976.5	5074.7	4989.7	4952.6	4734.7
32.5°	5650.5	5730.7	5582.3	5539.2	5516.4	5553.5	5530.8	5609.8	5551.1	5493.7	5224.3
35°	6395.1	6474.1	6332.9	6249.1	6158.1	6080.3	5998.9	6019.2	5964.1	5876.7	5597.8
37.5°	7099.0	7243.9	7094.2	7004.5	6836.9	6684.8	6457.4	6362.8	6311.3	6231.1	5949.8
40°	7816.1	7898.7	7785.0	7708.4	7526.4	7288.2	6924.2	6724.3	6654.9	6577.1	6338.8
42.5°	8344.0	8423.1	8362.0	8309.3	8166.9	7890.3	7419.9	7169.7	7069.1	6981.7	6779.4
45°	8763.0	8821.7	8783.4	8802.6	8741.5	8473.3	7933.4	7647.3	7543.2	7436.6	7277.4
47.5°	8931.8	8994.1	9055.1	9168.9	9273.0	9075.5	8485.3	8164.5	8054.3	7945.4	7788.6
50°	8912.7	8976.1	9153.3	9395.1	9718.4	9652.5	9067.1	8715.2	8613.4	8488.9	8344.0
52.5°	8759.5	8831.3	9058.7	9461.0	9975.7	10084.7	9659.7	9283.8	9188.0	9039.6	8894.7
55°	8357.2	8400.3	8741.5	9311.3	10036.8	10386.4	10240.3	9889.6	9793.8	9586.7	9428.7
57.5°	7611.4	7673.7	8170.5	8907.9	9883.6	10591.1	10750.3	10526.4	10434.3	10136.2	9971.0
60°	6638.1	6737.5	7306.1	8230.3	9493.3	10589.9	11213.6	11152.5	11075.9	10677.3	10504.9
62.5°	5536.8	5651.7	6198.8	7272.6	8810.9	10289.4	11503.3	11676.9	11637.4	11176.5	10956.2
65°	4252.2	4331.2	4875.9	6033.6	7749.1	9644.1	11536.8	12034.8	12042.0	11556.0	11192.0
67.5°	2831.2	3058.7	3531.6	4527.6	6326.9	8589.5	11242.3	12093.5	12162.9	11686.5	11073.5
70°	1381.5	1680.8	2144.1	2942.6	4527.6	6972.1	10472.6	11612.2	11766.7	11305.8	10367.2
72.5°	573.4	670.4	923.0	1452.1	2599.0	4704.8	8925.9	10307.4	10593.5	10017.6	8716.4
75°	386.7	419.0	527.9	744.6	1184.0	2320.1	6437.0	7685.6	8146.5	7565.9	6184.4
77.5°	298.1	318.4	384.3	520.8	703.9	877.5	3445.4	4631.7	4870.0	4508.4	3217.9
80°	234.6	250.2	287.3	379.5	499.2	469.3	1174.4	2098.6	2236.3	1875.9	1034.3
82.5°	203.5	209.5	205.9	257.4	331.6	274.1	385.5	774.5	854.8	620.1	337.6
85°	147.2	164.0	171.2	159.2	176.0	138.9	158.0	274.1	301.7	269.4	190.3
87.5°	59.9	88.6	108.9	103.0	64.6	39.5	49.1	80.2	92.2	100.6	62.3
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: P884419
 CATALOG NUMBER: NAV-SB5B-722-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2527.2	2527.2	2527.2	2527.2	2527.2	2527.2	2527.2	2527.2	2527.2	2527.2	2527.2
2.5°	2529.6	2537.9	2543.9	2551.1	2555.9	2563.1	2577.4	2585.8	2587.0	2593.0	2591.8
5°	2552.3	2564.3	2577.4	2596.6	2618.1	2636.1	2663.6	2682.8	2690.0	2696.0	2694.8
7.5°	2601.4	2618.1	2642.1	2675.6	2706.7	2730.7	2764.2	2786.9	2809.7	2818.1	2819.3
10°	2674.4	2698.3	2733.1	2778.6	2812.1	2843.2	2877.9	2897.1	2919.8	2929.4	2934.2
12.5°	2765.4	2790.5	2836.0	2899.5	2930.6	2952.1	2964.1	2959.3	2964.1	2972.5	2974.9
15°	2869.5	2897.1	2948.6	3016.8	3038.3	3019.2	2992.8	2968.9	2965.3	2967.7	2976.1
17.5°	2992.8	3013.2	3073.1	3130.5	3115.0	3035.9	2978.5	2940.2	2921.0	2915.0	2923.4
20°	3165.2	3165.2	3214.3	3250.2	3146.1	3012.0	2922.2	2860.0	2820.5	2803.7	2800.1
22.5°	3374.7	3355.6	3386.7	3361.6	3140.1	2945.0	2820.5	2712.7	2652.9	2628.9	2625.3
25°	3640.5	3617.8	3609.4	3453.7	3097.0	2838.4	2636.1	2505.6	2452.9	2439.8	2442.2
27.5°	4041.5	3984.1	3875.1	3504.0	3018.0	2670.8	2420.6	2299.7	2269.8	2271.0	2274.6
30°	4575.5	4460.5	4193.6	3512.4	2888.7	2433.8	2200.3	2114.1	2099.8	2105.8	2126.1
32.5°	5069.9	4960.9	4519.2	3474.1	2690.0	2201.5	2002.8	1945.3	1923.8	1931.0	1940.6
35°	5457.8	5427.8	4820.9	3420.2	2445.8	1983.7	1825.6	1776.6	1734.7	1725.1	1732.3
37.5°	5824.1	5812.1	5047.1	3344.8	2203.9	1829.2	1683.2	1618.5	1557.5	1524.0	1525.2
40°	6226.3	6214.3	5195.6	3228.7	1989.6	1695.1	1555.1	1470.1	1394.7	1333.6	1339.6
42.5°	6678.8	6608.2	5266.2	3062.3	1807.7	1581.4	1450.9	1336.0	1236.6	1180.4	1184.0
45°	7173.2	7014.0	5265.0	2850.4	1654.4	1477.3	1339.6	1176.8	1084.6	1031.9	1029.5
47.5°	7697.6	7401.9	5200.4	2615.7	1506.0	1362.3	1167.2	1042.7	981.7	949.3	942.1
50°	8238.7	7764.6	5090.2	2346.4	1354.0	1231.9	1059.5	974.5	927.8	897.9	887.1
52.5°	8747.5	8093.8	4957.3	2041.1	1199.5	1105.0	1011.6	945.7	896.7	863.1	848.8
55°	9220.4	8377.6	4769.4	1728.7	1073.8	1020.0	988.8	933.8	877.5	838.0	822.4
57.5°	9640.5	8561.9	4445.0	1435.4	984.0	961.3	964.9	913.4	848.8	815.3	793.7
60°	9990.1	8697.2	3964.9	1163.6	911.0	903.8	927.8	875.1	799.7	761.4	744.6
62.5°	10199.6	8694.8	3375.9	952.9	848.8	851.2	878.7	827.2	750.6	714.7	703.9
65°	10181.7	8481.7	2729.5	815.3	788.9	791.3	827.2	774.5	709.9	688.4	687.2
67.5°	9821.3	7962.2	2093.8	725.5	723.1	733.8	775.7	738.6	684.8	682.4	686.0
70°	8845.7	6883.5	1508.4	653.6	654.8	670.4	725.5	715.9	671.6	676.4	675.2
72.5°	7093.0	5248.3	1012.8	578.2	579.4	604.6	677.6	697.9	658.4	721.9	731.5
75°	4723.9	3273.0	651.2	498.0	499.2	531.5	635.7	663.2	622.5	719.5	725.5
77.5°	2269.8	1471.3	471.7	419.0	419.0	448.9	549.5	593.8	530.3	559.1	512.4
80°	784.1	553.1	371.1	337.6	330.4	350.8	463.3	514.8	457.3	421.4	395.1
82.5°	308.9	287.3	298.1	262.2	238.2	251.4	360.3	425.0	336.4	304.1	302.9
85°	177.2	186.8	210.7	173.6	137.7	154.4	264.6	305.3	253.8	223.9	228.7
87.5°	47.9	65.8	97.0	89.8	62.3	65.8	125.7	168.8	146.1	112.5	116.1
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)