

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: P884414

Luminaire Tested: **NAV-SB5B-722-U-SL4**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884414
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-722-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2200K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22571 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

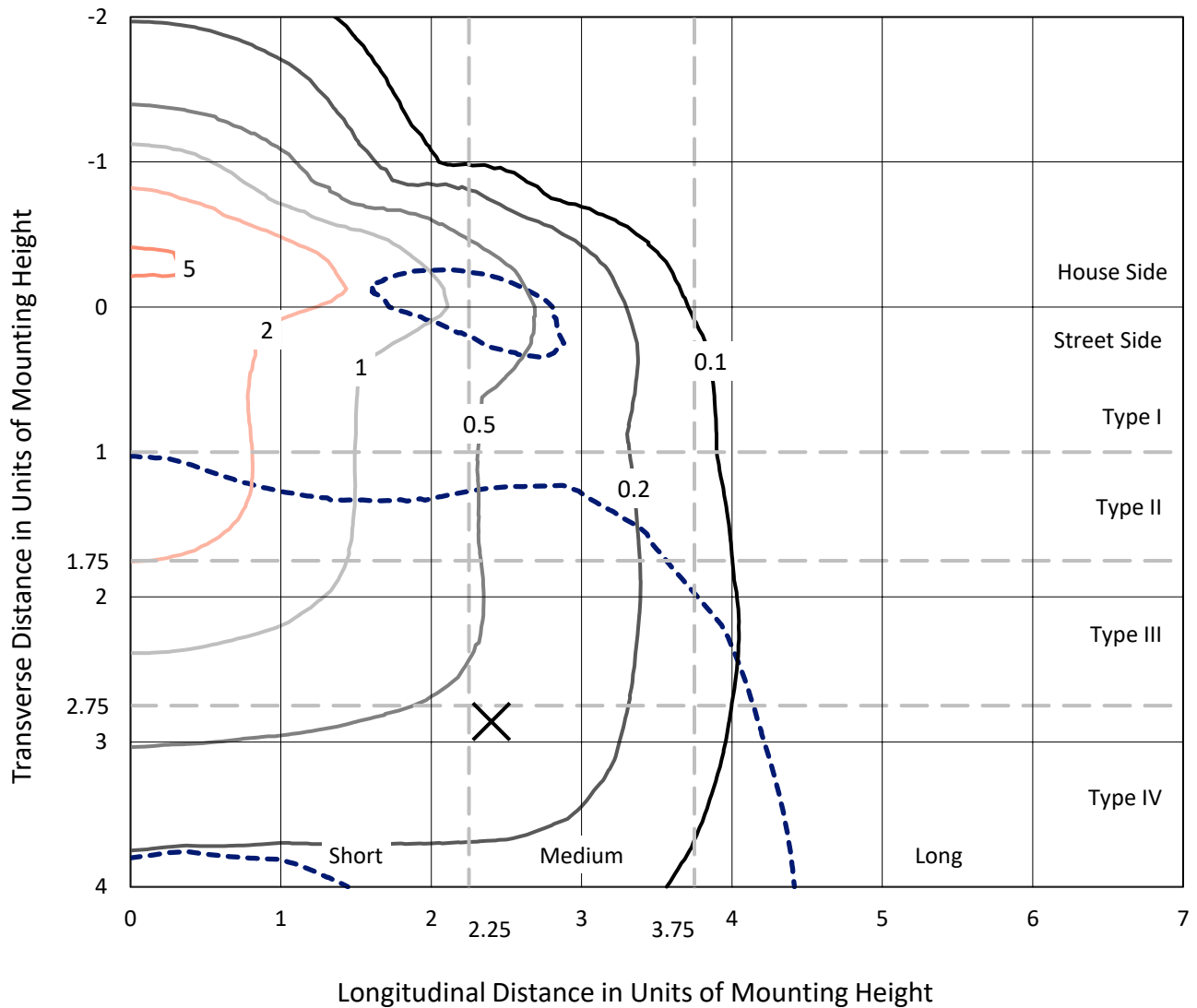
Input Watts (W): 182.7
Input Voltage (V): 120.0
Input Current (Ain): 1.547
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 11.125
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P884414
 CATALOG NUMBER: NAV-SB5B-722-U-SL4

Iso-Footcandle Lines of Horizontal Illumination

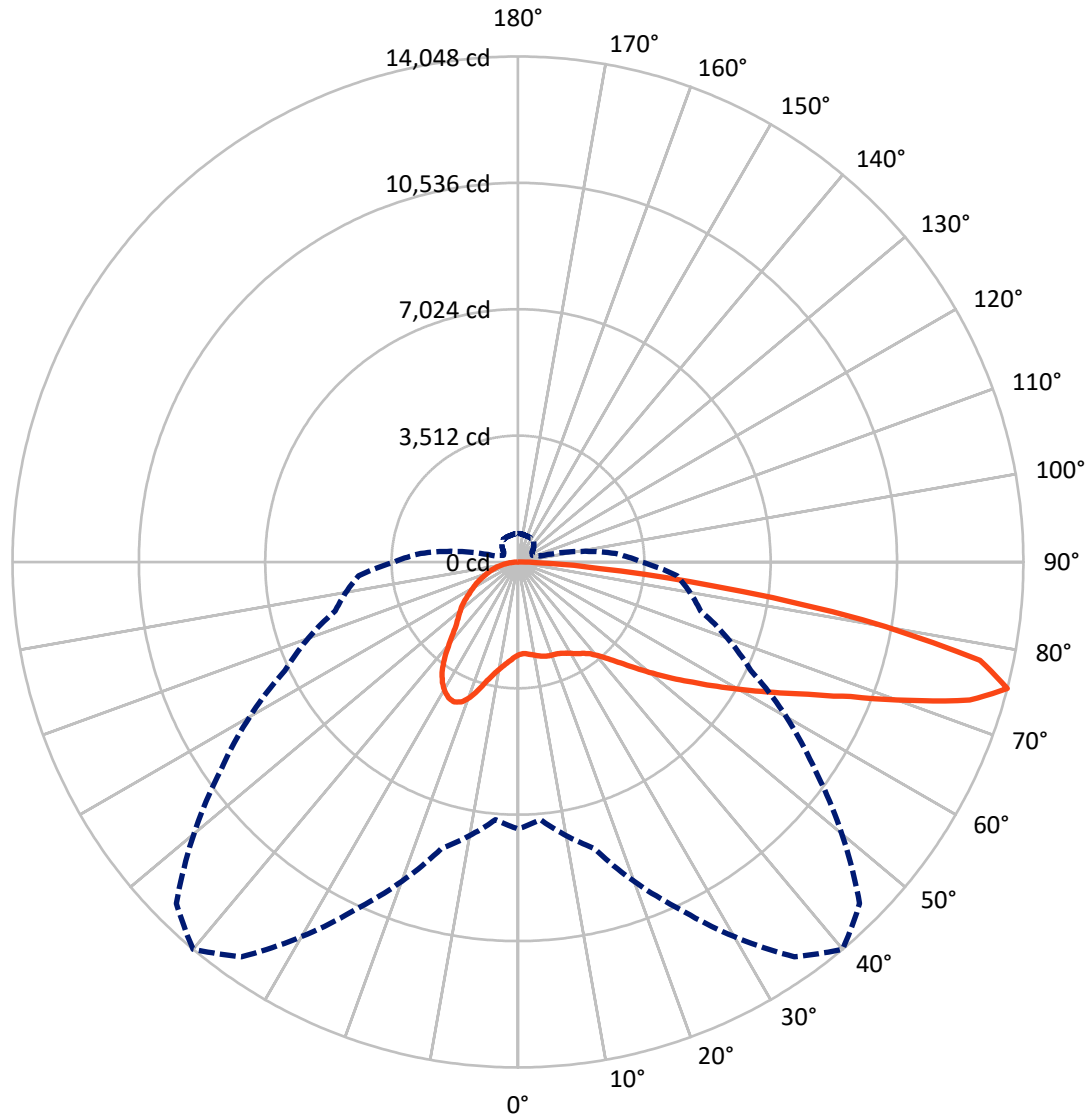
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P884414
CATALOG NUMBER: NAV-SB5B-722-U-SL4

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P884414

CATALOG NUMBER: NAV-SB5B-722-U-SL4

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6993.3	0.0	6993.3
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	15577.8	0.0	15577.8
	% Fixture	69.0	0.0	69.0
Total	Lumens	22571.0	0.0	22571.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.6	1.1
10°-20°	865.0	3.8
20°-30°	1579.4	7.0
30°-40°	2240.1	9.9
40°-50°	3024.7	13.4
50°-60°	4069.1	18.0
60°-70°	5164.6	22.9
70°-80°	4687.2	20.8
80°-90°	683.2	3.0
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°	22571.0	100.0
0°-180°	22571.0	100.0

Coefficient of Utilization



REPORT NUMBER: P884414

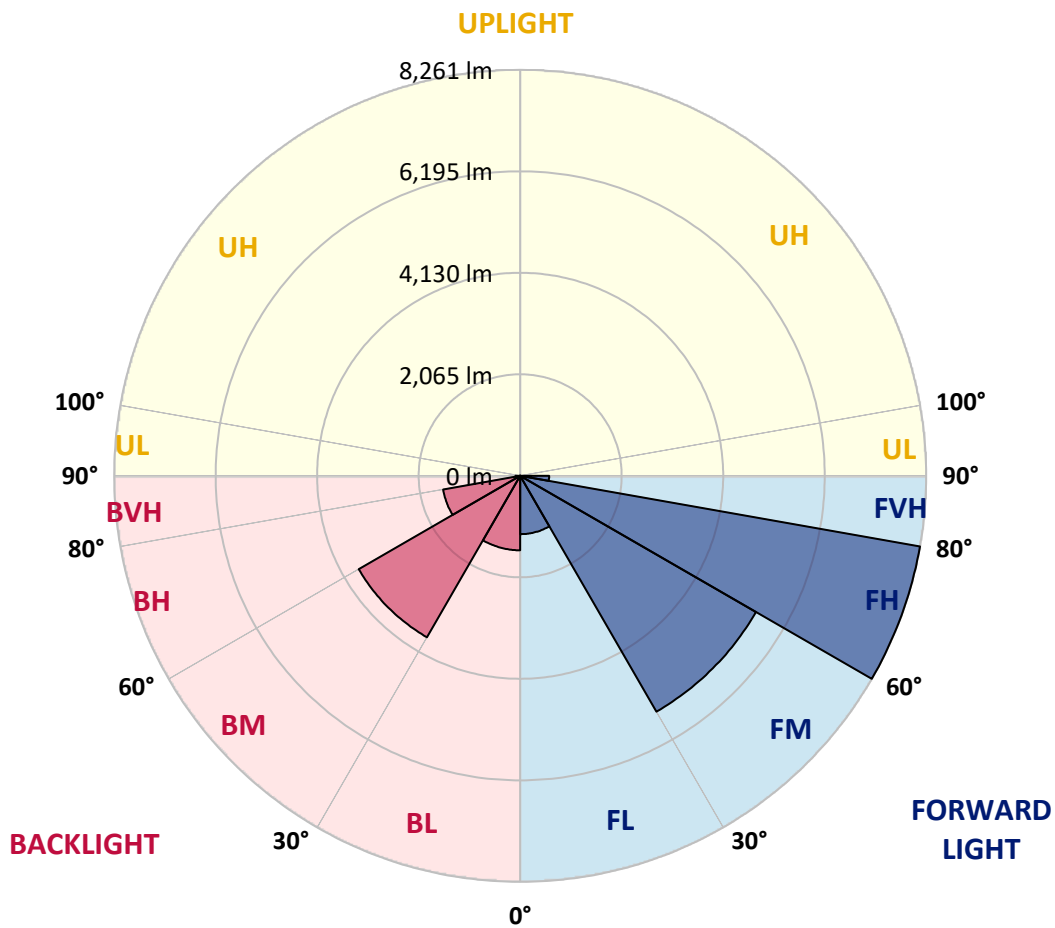
CATALOG NUMBER: NAV-SB5B-722-U-SL4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1187.3	5.3			
FM (30°-60°)	5540.7	24.5			
FH (60°-80°)	8260.6	36.6			G4/12000
FVH (80°-90°)	589.2	2.6			G4/750
BL (0°-30°)	1514.8	6.7	B3/2500		
BM (30°-60°)	3793.2	16.8	B3/5000		
BH (60°-80°)	1591.2	7.0	B3/2500		G3/2500
BVH (80°-90°)	94.1	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium



REPORT NUMBER: P884414

CATALOG NUMBER: NAV-SB5B-722-U-SL4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0
2.5°	2541.5	2555.9	2552.3	2547.5	2547.5	2548.7	2547.5	2555.9	2564.3	2572.6	2585.8
5°	2567.9	2582.2	2575.0	2569.1	2564.3	2563.1	2559.5	2558.3	2563.1	2573.8	2591.8
7.5°	2619.3	2633.7	2622.9	2612.1	2602.6	2597.8	2593.0	2585.8	2582.2	2588.2	2613.3
10°	2676.8	2691.2	2678.0	2658.8	2643.3	2637.3	2632.5	2625.3	2620.5	2624.1	2651.7
12.5°	2734.3	2748.6	2730.7	2704.3	2684.0	2680.4	2674.4	2672.0	2670.8	2669.6	2697.1
15°	2788.1	2800.1	2777.4	2746.2	2724.7	2718.7	2712.7	2716.3	2722.3	2729.5	2760.6
17.5°	2830.0	2842.0	2808.5	2767.8	2747.4	2745.0	2741.4	2753.4	2770.2	2788.1	2826.4
20°	2868.3	2880.3	2837.2	2782.1	2758.2	2758.2	2759.4	2784.5	2808.5	2834.8	2887.5
22.5°	2922.2	2931.8	2879.1	2803.7	2769.0	2771.4	2780.9	2806.1	2836.0	2871.9	2945.0
25°	3002.4	3009.6	2945.0	2844.4	2804.9	2812.1	2820.5	2832.4	2861.2	2903.1	3001.2
27.5°	3131.7	3137.7	3052.7	2916.2	2856.4	2868.3	2880.3	2871.9	2885.1	2921.0	3046.7
30°	3313.7	3317.3	3209.5	3028.8	2943.8	2949.7	2952.1	2917.4	2892.3	2921.0	3079.0
32.5°	3529.2	3528.0	3399.9	3165.2	3043.1	3037.1	3016.8	2948.5	2889.9	2915.0	3107.8
35°	3863.2	3850.0	3684.8	3356.8	3155.6	3118.5	3070.7	2983.3	2901.9	2909.0	3132.9
37.5°	4416.2	4375.5	4146.9	3670.4	3323.2	3228.7	3158.0	3039.5	2928.2	2906.6	3162.8
40°	5039.9	4988.5	4737.1	4100.2	3574.6	3422.6	3308.9	3119.7	2971.3	2917.4	3207.1
42.5°	5779.8	5706.7	5436.2	4606.6	3893.1	3672.8	3501.6	3221.5	3034.7	2952.1	3267.0
45°	6688.4	6591.4	6208.3	5177.6	4294.1	4000.8	3772.2	3375.9	3131.7	3019.2	3356.8
47.5°	7606.6	7630.5	7085.8	5831.2	4775.4	4405.5	4111.0	3608.2	3273.0	3126.9	3501.6
50°	8582.3	8599.0	7958.6	6555.5	5321.3	4862.8	4491.7	3867.9	3469.3	3280.2	3718.3
52.5°	9343.6	9346.0	8751.1	7313.3	5889.9	5365.6	4902.3	4164.8	3696.8	3483.7	4006.8
55°	9820.1	9814.1	9306.5	8030.4	6543.5	5893.5	5357.2	4502.4	3974.5	3723.1	4369.5
57.5°	10166.1	10148.1	9689.6	8646.9	7240.3	6517.2	5871.9	4885.5	4302.5	4008.0	4847.2
60°	10297.8	10287.0	9949.4	9179.6	7972.9	7206.8	6465.7	5314.1	4674.8	4344.4	5461.3
62.5°	10348.0	10368.4	10204.4	9695.6	8757.0	7970.5	7118.2	5826.5	5093.8	4725.1	6109.0
65°	10525.2	10562.3	10528.8	10370.8	9642.9	8864.8	7983.7	6435.8	5551.1	5133.3	6785.4
67.5°	10876.0	10913.1	10927.5	11178.9	10725.1	9979.3	9063.5	7194.8	6086.2	5557.1	7294.1
70°	10867.6	10856.8	11110.6	11821.7	12080.3	11522.4	10519.2	8128.5	6724.3	5909.1	7358.8
72.5°	9891.9	9805.7	10405.5	11814.5	13208.0	13133.8	12297.0	9332.9	7275.0	5952.2	6385.5
75°	7421.0	7191.2	8250.7	10647.3	13395.9	14048.4	13427.1	10079.9	7144.5	5259.0	4443.8
77.5°	3173.6	2942.6	4191.2	7881.9	11989.3	13132.6	12390.4	8794.2	5703.2	3477.7	2182.4
80°	830.8	829.6	1266.6	3573.4	8153.7	9698.0	8508.0	5679.2	3258.6	1242.6	602.2
82.5°	343.6	335.2	465.7	1389.9	3984.1	5442.2	4441.4	2533.1	1176.8	336.4	199.9
85°	128.1	126.9	226.3	480.1	1405.4	2244.6	1624.5	647.7	293.3	164.0	89.8
87.5°	35.9	34.7	49.1	166.4	342.4	519.6	277.7	106.5	82.6	64.6	26.3
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: P884414

CATALOG NUMBER: NAV-SB5B-722-U-SL4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0	2581.0
2.5°	2589.4	2595.4	2606.2	2614.5	2625.3	2637.3	2654.0	2664.8	2675.6	2682.8	2678.0
5°	2600.2	2613.3	2640.9	2668.4	2700.7	2730.7	2765.4	2790.5	2810.9	2816.9	2819.3
7.5°	2624.1	2645.7	2692.4	2739.0	2790.5	2839.6	2889.9	2933.0	2967.7	2980.9	2982.1
10°	2666.0	2694.8	2760.6	2826.4	2894.7	2970.1	3034.7	3097.0	3146.1	3166.4	3167.6
12.5°	2718.7	2754.6	2840.8	2931.8	3026.4	3130.5	3214.3	3290.9	3352.0	3379.5	3379.5
15°	2786.9	2833.6	2943.8	3065.9	3204.7	3349.6	3456.1	3541.1	3609.4	3642.9	3640.5
17.5°	2861.2	2923.4	3062.3	3246.6	3445.4	3635.7	3760.2	3822.5	3893.1	3925.4	3924.2
20°	2933.0	3009.6	3208.3	3476.5	3741.0	3943.4	4043.9	4060.7	4065.5	4069.1	4078.6
22.5°	3007.2	3110.2	3391.5	3766.2	4049.9	4190.0	4204.3	4132.5	4032.0	3985.3	3998.4
25°	3088.6	3225.1	3630.9	4085.8	4315.7	4332.4	4222.3	4047.5	3857.2	3769.8	3782.9
27.5°	3167.6	3358.0	3918.2	4391.1	4507.2	4360.0	4122.9	3875.1	3645.3	3553.1	3563.9
30°	3246.6	3510.0	4235.5	4658.1	4594.6	4291.7	3966.1	3689.6	3458.5	3361.6	3372.3
32.5°	3326.8	3687.2	4600.6	4850.8	4579.0	4146.9	3771.0	3481.3	3277.8	3176.0	3189.2
35°	3417.8	3905.1	4946.6	4956.1	4474.9	3933.8	3513.6	3232.3	3055.1	2973.7	2991.6
37.5°	3536.3	4181.6	5251.8	4982.5	4292.9	3621.3	3194.0	2937.8	2791.7	2754.6	2780.9
40°	3683.6	4514.4	5485.3	4940.6	4023.6	3241.8	2844.4	2639.7	2557.1	2565.5	2594.2
42.5°	3875.1	4886.7	5649.3	4832.8	3648.9	2850.4	2537.9	2446.9	2486.5	2520.0	2551.1
45°	4124.1	5273.4	5751.0	4649.7	3225.1	2518.8	2357.2	2378.7	2408.6	2412.2	2436.2
47.5°	4442.6	5664.8	5818.1	4373.1	2792.9	2285.3	2242.2	2247.0	2241.0	2215.9	2235.1
50°	4840.0	6045.5	5877.9	4006.8	2425.4	2139.3	2081.8	2065.1	1982.5	1901.1	1911.8
52.5°	5292.5	6395.1	5903.1	3551.9	2139.3	2017.2	1923.8	1818.4	1664.0	1638.9	1647.3
55°	5795.3	6718.3	5838.4	2992.8	1898.7	1860.3	1719.1	1592.2	1575.4	1553.9	1557.5
57.5°	6396.3	7066.7	5706.7	2369.1	1652.0	1677.2	1539.5	1553.9	1524.0	1490.4	1484.4
60°	7053.5	7427.0	5475.7	1800.5	1397.1	1448.5	1492.8	1491.6	1483.3	1455.7	1446.1
62.5°	7644.9	7664.1	5020.8	1379.1	1173.2	1271.4	1392.3	1391.1	1383.9	1368.3	1362.3
65°	7996.9	7628.1	4261.8	1085.8	988.8	1125.3	1255.8	1265.4	1266.6	1265.4	1265.4
67.5°	7934.6	7208.0	3220.3	864.3	836.8	976.9	1120.5	1133.7	1143.3	1145.7	1148.1
70°	7230.7	6285.0	2099.8	689.5	701.5	846.4	992.4	1005.6	1014.0	1023.6	1028.3
72.5°	5636.1	4620.9	1201.9	557.9	583.0	733.8	865.5	881.1	885.9	903.8	911.0
75°	3434.6	2717.5	648.8	439.3	478.9	627.3	739.8	757.8	766.2	787.7	790.1
77.5°	1632.9	1176.8	369.9	342.4	385.5	512.4	624.9	645.3	622.5	634.5	624.9
80°	551.9	437.0	233.4	261.0	294.5	399.8	500.4	520.8	472.9	470.5	465.7
82.5°	192.7	177.2	148.4	173.6	190.3	286.1	378.3	404.6	352.0	350.8	334.0
85°	75.4	71.8	82.6	94.6	113.7	176.0	249.0	262.2	216.7	174.8	172.4
87.5°	15.6	16.8	20.4	21.5	34.7	61.1	89.8	110.1	87.4	74.2	68.2
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)