

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: P884261

Luminaire Tested: **NAV-SB5A-727-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884261
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-727-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20389 lumens
Efficiency: N/A
Efficacy: 143.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

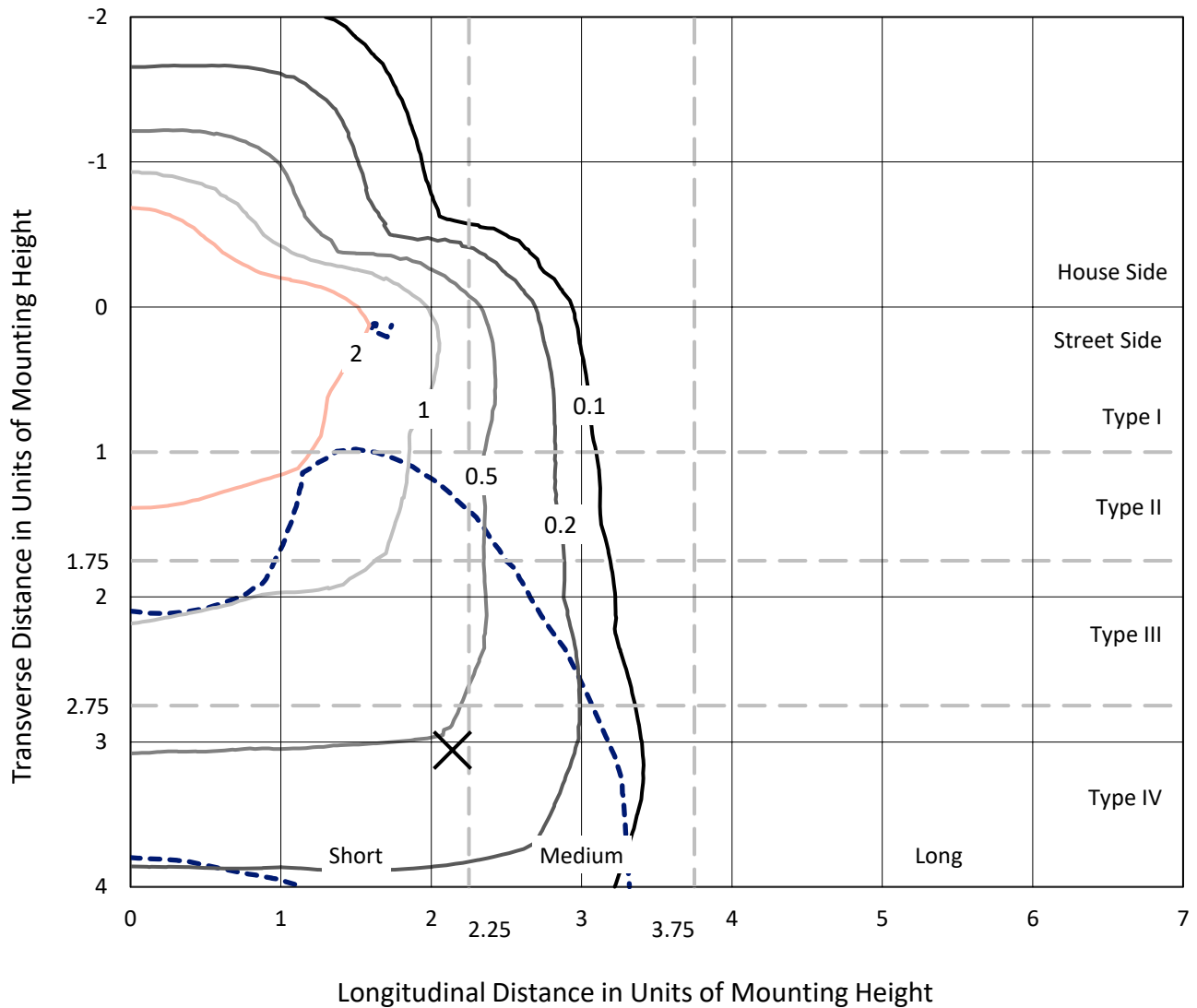
Input Watts (W): 141.7
Input Voltage (V): 120.0
Input Current (Ain): 1.201
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 10.503
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P884261
 CATALOG NUMBER: NAV-SB5A-727-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

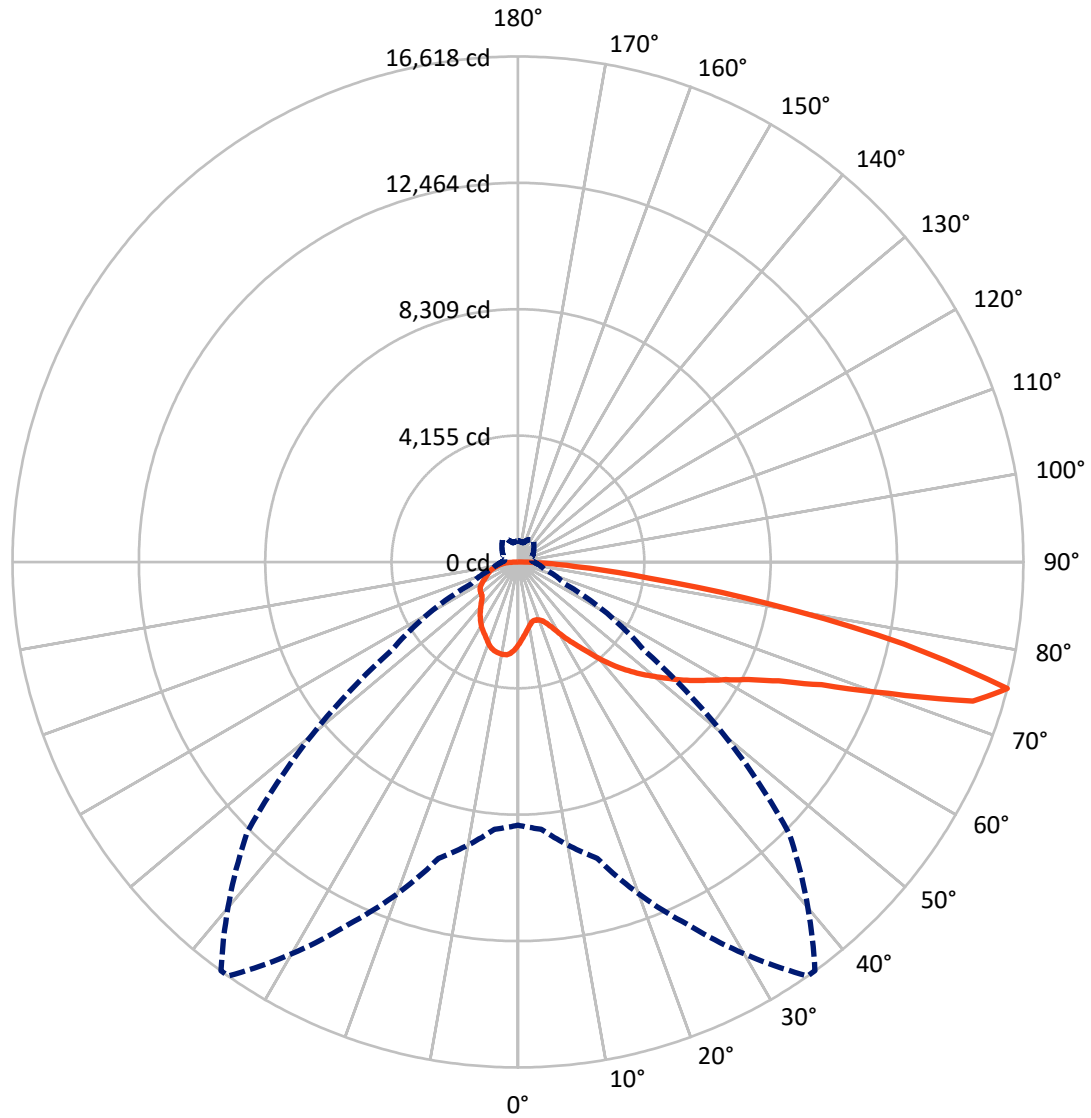
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
 Type IV - Short - N/A

REPORT NUMBER: P884261
CATALOG NUMBER: NAV-SB5A-727-U-T4FT

Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P884261

CATALOG NUMBER: NAV-SB5A-727-U-T4FT

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4852.1	0.0	4852.1
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	15536.9	0.0	15536.9
	% Fixture	76.2	0.0	76.2
Total	Lumens	20389.0	0.0	20389.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.2	1.3
10°-20°	742.0	3.6
20°-30°	1246.0	6.1
30°-40°	1936.5	9.5
40°-50°	2874.2	14.1
50°-60°	3968.1	19.5
60°-70°	4814.2	23.6
70°-80°	3978.5	19.5
80°-90°	572.2	2.8
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°	20389.0	100.0
0°-180°	20389.0	100.0

Coefficient of Utilization



REPORT NUMBER: P884261

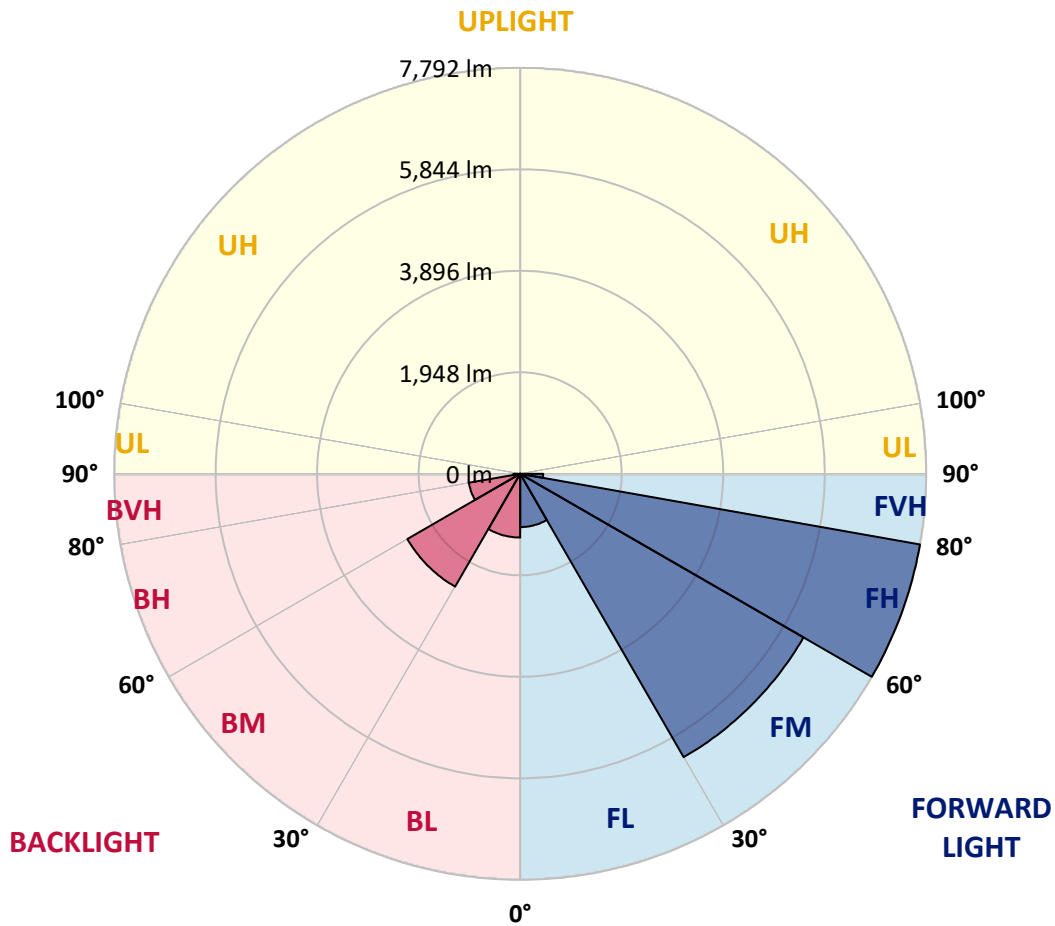
CATALOG NUMBER: NAV-SB5A-727-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1022.5	5.0			
FM (30°-60°)	6278.7	30.8			
FH (60°-80°)	7792.4	38.2			G4/12000
FVH (80°-90°)	443.4	2.2			G3/500
BL (0°-30°)	1222.8	6.0	B3/2500		
BM (30°-60°)	2500.1	12.3	B3/5000		
BH (60°-80°)	1000.3	4.9	B3/2500		G3/2500
BVH (80°-90°)	128.9	0.6			G2/225
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 Short



REPORT NUMBER: P884261
 CATALOG NUMBER: NAV-SB5A-727-U-T4FT

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2717.0	2717.0	2717.0	2717.0	2717.0	2717.0	2717.0	2717.0	2717.0	2717.0	2717.0
2.5°	2505.3	2520.8	2527.4	2524.1	2540.6	2538.4	2561.6	2590.2	2629.9	2668.5	2724.7
5°	2312.5	2329.0	2343.3	2356.5	2388.5	2398.4	2434.8	2489.9	2562.7	2636.5	2729.1
7.5°	2132.8	2147.1	2169.2	2193.4	2247.4	2257.3	2318.0	2403.9	2505.3	2613.4	2741.2
10°	1986.2	2000.5	2023.7	2051.2	2118.5	2130.6	2207.7	2322.4	2454.6	2591.3	2754.4
12.5°	1923.4	1927.8	1941.0	1968.6	2027.0	2034.7	2119.6	2250.7	2405.0	2574.8	2774.3
15°	1920.1	1928.9	1930.0	1944.3	1992.8	1996.1	2074.4	2204.4	2374.2	2571.5	2804.0
17.5°	1953.1	1959.7	1949.8	1958.6	1999.4	2004.9	2066.7	2182.4	2364.3	2585.8	2854.7
20°	2041.3	2046.8	2017.1	2004.9	2034.7	2039.1	2099.7	2196.7	2374.2	2615.6	2924.2
22.5°	2228.7	2232.0	2159.2	2109.6	2111.9	2114.1	2167.0	2255.1	2412.8	2669.6	3012.4
25°	2520.8	2518.6	2402.8	2306.9	2251.8	2239.7	2275.0	2349.9	2477.8	2741.2	3125.9
27.5°	2862.5	2845.9	2730.2	2586.9	2466.8	2449.1	2441.4	2473.4	2570.4	2836.0	3264.8
30°	3248.2	3232.8	3108.3	2920.9	2754.4	2725.8	2653.0	2636.5	2708.2	2965.0	3457.7
32.5°	3671.5	3661.6	3512.8	3285.7	3063.1	3030.0	2907.7	2863.6	2919.8	3160.1	3726.6
35°	4026.4	4017.6	3894.1	3660.5	3388.2	3347.4	3222.9	3173.3	3201.9	3410.3	4078.2
37.5°	4347.2	4342.7	4236.9	4052.9	3771.8	3722.2	3582.2	3565.7	3560.2	3739.8	4504.8
40°	4644.8	4633.7	4523.5	4426.5	4218.2	4173.0	4049.6	4035.2	3993.3	4145.4	4987.5
42.5°	4974.3	4945.7	4785.8	4740.6	4684.4	4647.0	4573.1	4575.3	4482.7	4602.9	5499.0
45°	5243.3	5226.7	5062.5	5036.0	5096.7	5081.2	5145.2	5161.7	4982.0	5082.3	6030.2
47.5°	5532.0	5516.6	5377.7	5359.0	5523.2	5527.6	5753.6	5759.1	5469.2	5580.5	6562.6
50°	5888.1	5866.0	5728.2	5751.4	5935.5	5952.0	6365.3	6327.8	5917.8	6086.5	7090.6
52.5°	6122.8	6136.1	6106.3	6143.8	6395.1	6410.5	6967.1	6871.2	6362.0	6585.8	7608.6
55°	6295.9	6322.3	6414.9	6500.9	6880.1	6895.5	7534.8	7388.2	6730.2	7048.7	8095.8
57.5°	6518.5	6481.1	6654.1	6821.6	7340.8	7381.6	8087.0	7886.4	7056.4	7447.7	8429.8
60°	6838.2	6811.7	6946.2	7194.2	7856.6	7921.7	8671.2	8335.0	7295.6	7764.0	8494.8
62.5°	7486.3	7420.1	7441.1	7660.4	8506.9	8592.9	9330.3	8726.3	7414.6	7887.5	8146.5
65°	8455.1	8341.6	8235.8	8387.9	9422.9	9507.7	10074.3	9033.8	7370.5	7648.3	7221.7
67.5°	9675.3	9562.9	9432.8	9576.1	10772.0	10839.2	10992.4	9206.8	7023.3	6726.8	5587.2
70°	10681.6	10639.7	10795.1	11384.8	12926.8	12929.0	12169.6	9063.6	6072.1	4769.3	3232.8
72.5°	10548.2	10522.9	11341.8	13164.9	15642.7	15584.3	13284.0	7979.0	4090.3	2151.5	1211.3
75°	8653.5	8817.8	10086.4	13133.0	16618.2	16610.5	12601.7	5072.4	1691.9	891.7	626.1
77.5°	4640.3	4900.5	6548.3	9696.2	12973.1	13168.2	8859.6	1774.6	726.4	570.9	433.2
80°	1513.3	1740.4	2610.1	4936.8	8429.8	8393.4	3797.1	696.6	497.1	404.5	299.8
82.5°	642.6	669.0	1166.1	2331.2	4326.2	4259.0	1209.1	400.1	349.4	276.7	185.2
85°	251.3	281.1	514.7	1078.0	1873.8	1833.0	436.5	198.4	223.8	180.8	110.2
87.5°	82.7	100.3	184.1	369.2	583.1	562.1	106.9	68.3	97.0	82.7	39.7
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: P884261
 CATALOG NUMBER: NAV-SB5A-727-U-T4FT

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2717.0	2717.0	2717.0	2717.0	2717.0	2717.0	2717.0	2717.0	2717.0	2717.0	2717.0
2.5°	2740.1	2757.8	2778.7	2809.6	2836.0	2858.1	2881.2	2895.5	2901.0	2917.6	2916.5
5°	2760.0	2798.5	2850.3	2901.0	2950.6	2980.4	3006.9	3020.1	3032.2	3041.0	3043.2
7.5°	2793.0	2842.6	2924.2	2990.3	3032.2	3056.5	3074.1	3069.7	3074.1	3076.3	3079.6
10°	2821.7	2891.1	2988.1	3050.9	3082.9	3084.0	3079.6	3064.2	3056.5	3057.6	3059.8
12.5°	2855.9	2933.0	3037.7	3090.6	3099.4	3075.2	3056.5	3030.0	3020.1	3015.7	3013.5
15°	2902.1	2990.3	3091.7	3111.6	3089.5	3058.7	3026.7	2983.7	2961.7	2944.0	2949.5
17.5°	2958.4	3055.4	3133.6	3119.3	3071.9	3021.2	2969.4	2904.3	2859.2	2840.4	2841.5
20°	3036.6	3123.7	3165.6	3102.7	3031.1	2953.9	2865.8	2786.4	2744.5	2725.8	2723.6
22.5°	3131.4	3215.2	3196.4	3074.1	2972.7	2849.2	2739.0	2680.6	2659.7	2646.4	2648.6
25°	3244.9	3316.6	3218.5	3032.2	2876.8	2710.4	2625.5	2606.8	2596.8	2586.9	2586.9
27.5°	3392.6	3431.2	3235.0	2970.5	2726.9	2562.7	2531.8	2535.1	2531.8	2515.3	2518.6
30°	3587.7	3580.0	3250.4	2870.2	2554.9	2429.3	2431.5	2445.8	2448.0	2437.0	2442.5
32.5°	3844.5	3766.3	3258.2	2740.1	2390.7	2312.5	2314.7	2330.1	2341.1	2322.4	2331.2
35°	4155.4	3983.4	3246.0	2577.0	2264.0	2201.1	2184.6	2189.0	2192.3	2174.7	2186.8
37.5°	4518.0	4227.0	3192.0	2396.2	2159.2	2092.0	2056.7	2027.0	2009.3	1992.8	2003.8
40°	4915.9	4492.6	3092.8	2219.9	2042.4	1976.3	1923.4	1867.2	1807.6	1785.6	1795.5
42.5°	5332.5	4766.0	2972.7	2051.2	1907.9	1853.9	1797.7	1716.2	1626.9	1581.7	1587.2
45°	5764.6	5046.0	2854.7	1884.8	1770.2	1747.0	1682.0	1583.9	1486.9	1429.6	1425.2
47.5°	6187.9	5310.5	2681.7	1717.3	1641.2	1666.6	1615.9	1525.5	1417.5	1327.1	1317.2
50°	6592.4	5558.5	2398.4	1547.5	1536.5	1642.3	1593.8	1463.7	1340.3	1224.6	1214.6
52.5°	6993.6	5759.1	2035.8	1393.2	1480.3	1635.7	1565.2	1421.9	1270.9	1149.6	1136.4
55°	7334.2	5862.7	1686.4	1260.9	1398.7	1579.5	1531.0	1372.3	1172.8	1043.8	1032.8
57.5°	7528.2	5778.9	1395.4	1130.9	1286.3	1486.9	1472.6	1266.5	1055.9	956.7	943.5
60°	7444.4	5439.5	1157.3	1017.3	1179.4	1386.6	1371.2	1161.7	966.6	873.0	859.7
62.5°	6982.6	4792.5	968.9	918.1	1082.4	1284.1	1269.8	1081.3	898.3	807.9	793.6
65°	6052.3	3898.6	822.3	835.5	984.3	1160.6	1181.6	1014.0	844.3	756.1	741.8
67.5°	4616.1	2823.9	707.6	763.8	888.4	1039.4	1100.0	965.5	799.1	715.3	702.1
70°	2631.0	1603.7	610.6	694.4	803.5	927.0	1037.2	927.0	750.6	681.2	672.4
72.5°	997.5	736.3	528.0	625.0	722.0	832.2	967.7	866.3	694.4	642.6	633.8
75°	532.4	448.6	444.2	543.4	628.3	739.6	880.7	806.8	652.5	679.0	701.0
77.5°	362.6	317.4	371.4	465.1	525.8	637.1	788.1	716.4	565.4	563.2	519.1
80°	251.3	224.9	302.0	374.8	406.7	535.7	687.8	615.0	460.7	429.9	411.1
82.5°	151.0	146.6	226.0	280.0	287.7	413.3	569.8	515.8	377.0	328.5	330.7
85°	82.7	87.1	144.4	164.2	167.5	288.8	446.4	399.0	289.9	243.6	245.8
87.5°	23.1	29.8	52.9	65.0	80.5	149.9	265.6	237.0	145.5	101.4	101.4
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)