

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: P883747

Luminaire Tested: **NAV-SB4B-727-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883747
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4B-727-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20492 lumens
Efficiency: N/A
Efficacy: 139.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

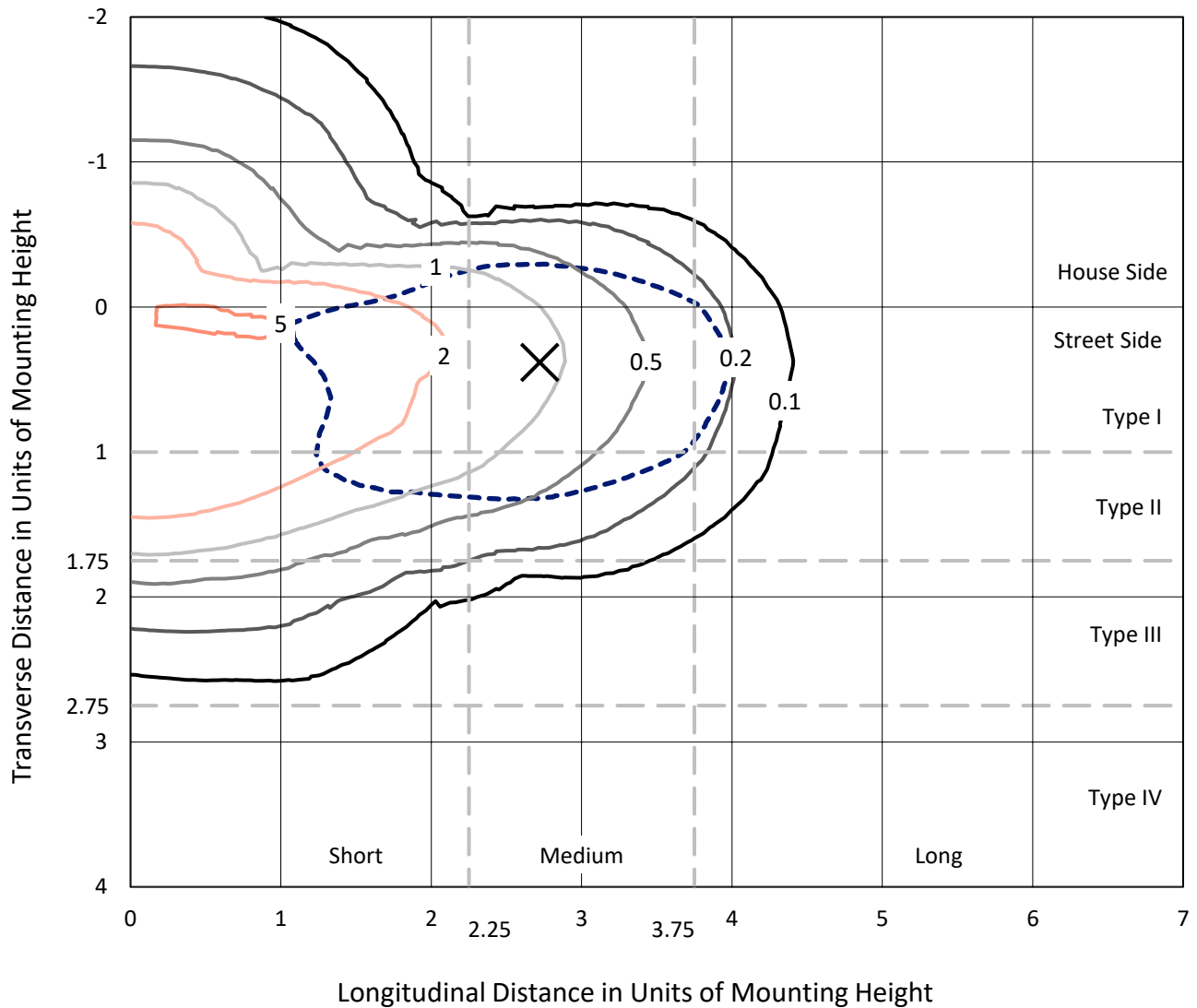
Input Watts (W): 147
Input Voltage (V): 120.0
Input Current (Ain): 1.255
Voltage Rise (V): NR
Power Factor: 0.988
Total Harmonic Distortion (THDi): 13.593
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P883747
 CATALOG NUMBER: NAV-SB4B-727-U-T2

Iso-Footcandle Lines of Horizontal Illumination

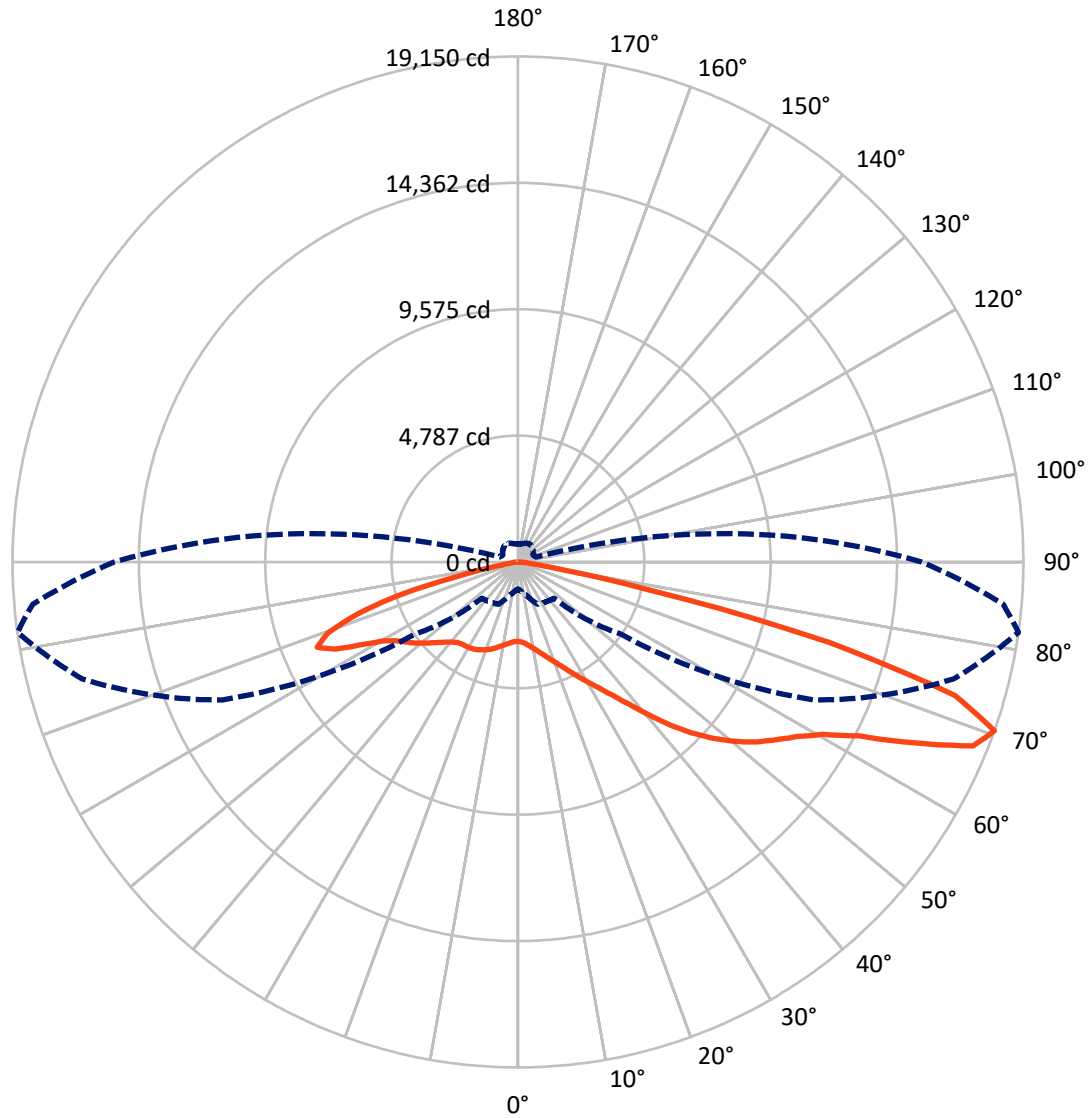
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
 Type II - Medium - N/A

REPORT NUMBER: P883747
CATALOG NUMBER: NAV-SB4B-727-U-T2

Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P883747
 CATALOG NUMBER: NAV-SB4B-727-U-T2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5051.8	0.0	5051.8
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	15440.2	0.0	15440.2
	% Fixture	75.3	0.0	75.3
Total	Lumens	20492.0	0.0	20492.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.7	1.4
10°-20°	815.0	4.0
20°-30°	1363.4	6.7
30°-40°	2130.0	10.4
40°-50°	3392.2	16.6
50°-60°	4720.7	23.0
60°-70°	4938.1	24.1
70°-80°	2580.9	12.6
80°-90°	268.0	1.3
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°	20492.0	100.0
0°-180°	20492.0	100.0

Coefficient of Utilization



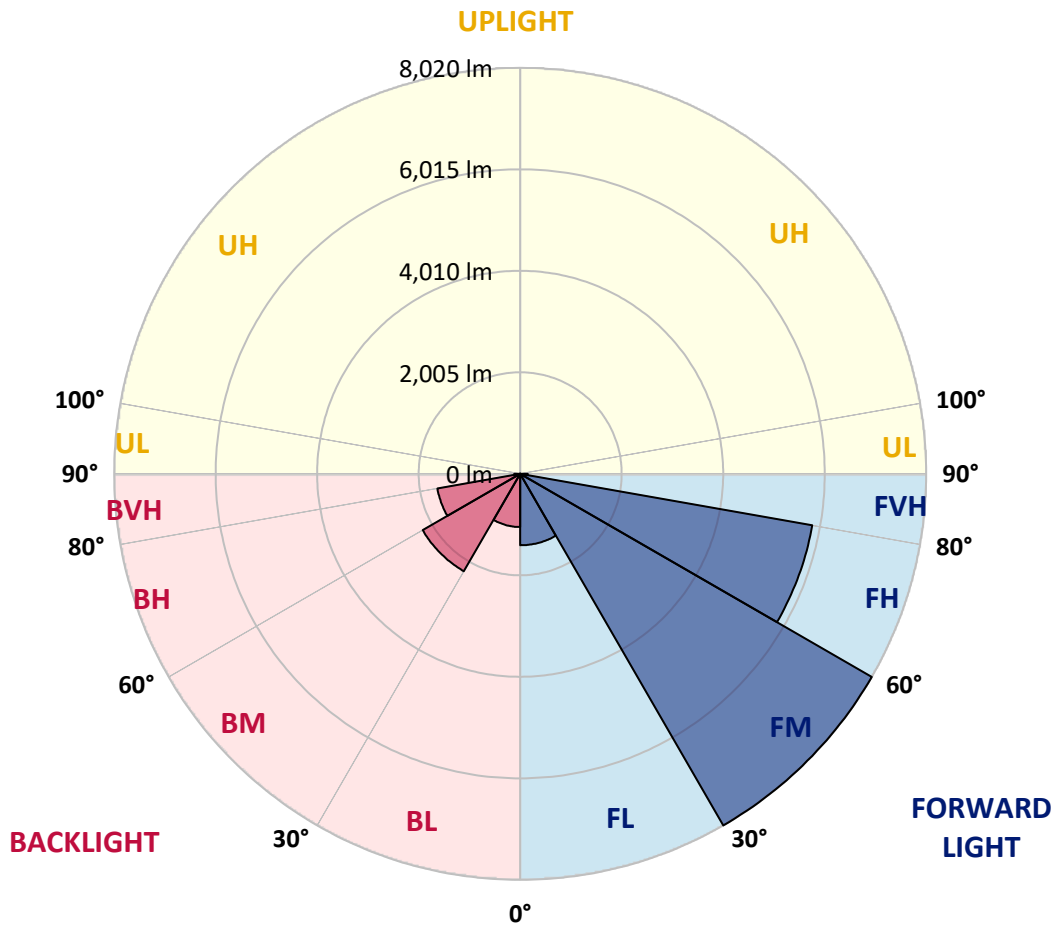
REPORT NUMBER: P883747
 CATALOG NUMBER: NAV-SB4B-727-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1411.1	6.9			
FM (30°-60°)	8020.4	39.1			
FH (60°-80°)	5858.7	28.6			G3/7500
FVH (80°-90°)	150.0	0.7			G2/225
BL (0°-30°)	1051.0	5.1	B3/2500		
BM (30°-60°)	2222.6	10.8	B2/2500		
BH (60°-80°)	1660.3	8.1	B3/2500		G3/2500
BVH (80°-90°)	118.0	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-G3

Type II Medium



REPORT NUMBER: P883747

CATALOG NUMBER: NAV-SB4B-727-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3004.4	3004.4	3004.4	3004.4	3004.4	3004.4	3004.4	3004.4	3004.4	3004.4	3004.4
2.5°	3076.1	3093.5	3088.1	3082.7	3082.7	3075.1	3074.0	3063.1	3054.4	3040.3	3037.0
5°	3115.3	3133.8	3131.6	3136.0	3150.1	3153.4	3156.6	3150.1	3132.7	3115.3	3107.7
7.5°	3080.5	3101.2	3107.7	3133.8	3177.3	3216.4	3245.8	3257.7	3241.4	3216.4	3204.5
10°	2963.1	2985.9	3008.7	3070.7	3147.9	3240.3	3318.6	3365.4	3362.1	3338.2	3317.5
12.5°	2724.9	2748.9	2797.8	2918.5	3059.8	3222.9	3368.6	3466.5	3500.2	3482.8	3446.9
15°	2534.6	2555.3	2592.3	2716.2	2900.0	3147.9	3387.1	3577.4	3663.3	3653.5	3610.0
17.5°	2529.2	2537.9	2560.7	2619.5	2760.8	3030.5	3367.6	3686.2	3850.4	3849.3	3794.9
20°	2624.9	2628.2	2641.2	2653.2	2733.6	2941.3	3317.5	3776.4	4060.2	4060.2	4001.5
22.5°	2757.6	2755.4	2768.4	2757.6	2796.7	2933.7	3286.0	3855.8	4294.0	4311.4	4237.5
25°	2956.5	2945.7	2942.4	2917.4	2925.0	3004.4	3320.8	3946.0	4571.3	4607.2	4514.7
27.5°	3221.9	3204.5	3192.5	3134.9	3115.3	3150.1	3427.4	4054.8	4880.1	4942.1	4824.6
30°	3567.6	3536.1	3518.7	3418.7	3348.0	3353.4	3588.3	4199.4	5203.0	5303.1	5154.1
32.5°	4039.6	3990.6	3943.9	3779.7	3650.3	3607.9	3796.0	4399.5	5553.2	5713.0	5521.6
35°	4568.0	4528.9	4478.8	4225.5	4026.5	3928.6	4076.5	4678.9	5963.1	6216.5	5967.4
37.5°	5076.9	5043.2	5067.1	4725.7	4469.1	4326.6	4444.1	5054.1	6468.7	6842.8	6526.4
40°	5603.2	5577.1	5580.3	5254.1	4955.1	4795.3	4889.9	5524.9	7048.3	7587.6	7198.3
42.5°	6175.1	6155.6	6090.3	5801.1	5465.1	5316.1	5403.1	6068.6	7670.3	8435.8	7935.6
45°	6815.6	6803.6	6742.7	6411.1	6026.2	5858.7	5976.1	6668.8	8295.5	9233.9	8676.1
47.5°	7369.1	7378.8	7371.2	7091.8	6692.7	6447.0	6587.2	7295.1	8877.2	9984.2	9386.1
50°	7635.5	7686.6	7761.6	7674.6	7426.7	7176.6	7203.8	7899.7	9431.8	10687.7	10066.8
52.5°	7496.3	7593.1	7797.5	7936.7	8032.3	7980.2	7907.3	8499.9	9953.7	11322.7	10710.5
55°	6977.6	7113.5	7452.8	7788.8	8277.0	8656.5	8752.2	9165.4	10462.6	11881.6	11319.4
57.5°	6032.7	6253.4	6557.9	7237.5	8059.5	8983.8	9737.3	10088.6	11001.9	12478.6	11956.6
60°	4412.5	4708.3	5086.7	6097.9	7298.4	8808.7	10575.7	11506.5	11768.5	13251.7	12786.3
62.5°	2823.9	3006.6	3354.5	4307.0	5686.9	7911.7	10832.3	13278.9	13067.9	14519.6	14030.2
65°	1933.3	2050.8	2369.4	2904.3	3676.4	5889.2	10145.1	14607.6	15131.7	16529.0	16157.1
67.5°	1404.9	1494.0	1765.9	2234.5	2395.5	3485.0	7872.5	14546.7	17137.9	18599.3	18020.9
70°	1024.3	1087.4	1315.7	1765.9	1843.1	1938.8	4769.2	12365.5	17094.4	19149.5	18456.9
72.5°	759.0	802.5	955.8	1370.1	1491.9	1309.2	2360.7	8987.1	14689.2	17320.6	16765.0
75°	549.1	581.7	694.8	1048.2	1193.9	997.1	1177.6	5252.0	10246.2	12183.9	12281.8
77.5°	419.7	444.7	518.7	767.7	955.8	748.1	730.7	2416.1	4858.3	4882.3	5156.3
80°	337.1	353.4	393.6	540.4	732.9	560.0	476.3	975.4	1535.4	1299.4	1363.6
82.5°	247.9	275.1	332.7	379.5	524.1	386.0	290.3	492.6	583.9	502.4	506.7
85°	141.4	159.8	201.2	271.8	334.9	236.0	166.4	218.6	271.8	222.9	199.0
87.5°	50.0	65.2	70.7	106.6	145.7	97.9	64.2	63.1	89.2	66.3	55.5
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: P883747

CATALOG NUMBER: NAV-SB4B-727-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3004.4	3004.4	3004.4	3004.4	3004.4	3004.4	3004.4	3004.4	3004.4	3004.4	3004.4
2.5°	3026.1	3020.7	2998.9	2969.6	2939.1	2909.8	2900.0	2879.3	2865.2	2857.6	2866.3
5°	3087.0	3069.6	3018.5	2953.3	2884.8	2810.8	2758.6	2710.8	2676.0	2643.4	2656.4
7.5°	3174.0	3143.6	3055.5	2941.3	2819.5	2696.7	2605.3	2535.7	2489.0	2458.5	2465.1
10°	3275.1	3228.4	3093.5	2922.8	2734.7	2558.6	2450.9	2391.1	2361.8	2345.4	2349.8
12.5°	3391.5	3325.2	3132.7	2880.4	2605.3	2404.2	2330.2	2312.8	2313.9	2315.0	2317.2
15°	3535.0	3442.6	3164.2	2788.0	2436.8	2285.6	2272.6	2300.9	2330.2	2344.4	2343.3
17.5°	3697.0	3566.6	3169.7	2635.8	2271.5	2209.5	2250.8	2311.7	2356.3	2375.9	2380.2
20°	3871.0	3692.7	3130.5	2420.5	2135.6	2147.5	2221.5	2299.8	2348.7	2373.7	2380.2
22.5°	4070.0	3827.5	3037.0	2194.3	2024.7	2080.1	2167.1	2243.2	2294.3	2319.3	2325.9
25°	4297.3	3978.7	2890.2	2004.0	1929.0	2004.0	2091.0	2154.1	2195.4	2218.2	2224.7
27.5°	4549.5	4136.3	2694.5	1852.9	1845.3	1925.7	1997.5	2046.4	2068.2	2085.6	2092.1
30°	4802.9	4279.9	2457.4	1738.7	1772.4	1848.5	1899.6	1921.4	1927.9	1931.2	1938.8
32.5°	5076.9	4403.8	2208.4	1644.1	1702.8	1773.5	1803.9	1813.7	1783.3	1762.6	1769.1
35°	5408.5	4536.5	1964.9	1569.1	1634.3	1695.2	1705.0	1696.3	1660.4	1618.0	1620.2
37.5°	5818.5	4701.8	1770.2	1515.8	1570.2	1610.4	1598.4	1596.2	1599.5	1549.5	1552.8
40°	6320.8	4917.1	1627.8	1474.5	1518.0	1526.7	1492.9	1511.4	1527.7	1451.6	1453.8
42.5°	6878.7	5176.9	1537.5	1446.2	1474.5	1453.8	1401.6	1422.3	1420.1	1320.1	1319.0
45°	7447.3	5459.6	1506.0	1425.5	1434.2	1392.9	1335.3	1340.7	1295.0	1204.8	1208.1
47.5°	8012.8	5763.0	1525.6	1408.1	1384.2	1337.5	1292.9	1269.0	1201.5	1134.1	1134.1
50°	8567.3	6081.6	1597.3	1373.3	1315.7	1288.5	1255.9	1213.5	1141.7	1084.1	1079.8
52.5°	9081.7	6402.4	1677.8	1315.7	1229.8	1246.1	1225.5	1176.5	1105.8	1047.1	1048.2
55°	9568.8	6723.2	1709.3	1236.3	1149.3	1209.1	1197.2	1106.9	1022.1	974.3	969.9
57.5°	10099.4	7109.2	1674.5	1135.2	1084.1	1166.7	1121.1	1021.0	972.1	936.2	933.0
60°	10834.5	7714.8	1599.5	1010.2	1022.1	1103.7	1025.4	984.1	930.8	890.6	888.4
62.5°	12055.6	8844.6	1478.8	886.2	949.3	1010.2	979.7	938.4	884.0	844.9	844.9
65°	13860.6	10414.8	1251.6	789.4	867.7	918.8	930.8	889.5	832.9	791.6	793.8
67.5°	15382.9	11399.9	947.1	709.0	784.0	844.9	878.6	838.4	778.6	738.3	739.4
70°	15299.2	10684.4	723.1	629.6	710.0	772.0	815.5	784.0	719.8	681.8	685.0
72.5°	13588.8	8938.1	585.0	549.1	635.0	695.9	748.1	724.2	658.9	622.0	622.0
75°	9983.1	6344.8	467.6	467.6	541.5	616.5	674.2	658.9	599.1	573.0	565.4
77.5°	4208.1	2661.9	366.4	388.2	450.2	529.5	601.3	606.7	554.6	587.2	532.8
80°	1118.9	734.0	279.5	305.5	353.4	437.1	523.0	520.8	464.3	433.9	403.4
82.5°	426.2	289.2	199.0	215.3	255.5	334.9	414.3	427.3	370.8	320.8	320.8
85°	164.2	124.0	122.9	129.4	149.0	221.8	313.2	324.0	279.5	237.0	244.7
87.5°	42.4	37.0	45.7	43.5	68.5	118.5	179.4	185.9	170.7	99.0	141.4
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)