

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: P967889

Luminaire Tested: **NAV-SB5A-830-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967889
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-830-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20678.4 lumens
Efficiency: N/A
Efficacy: 145.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - 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



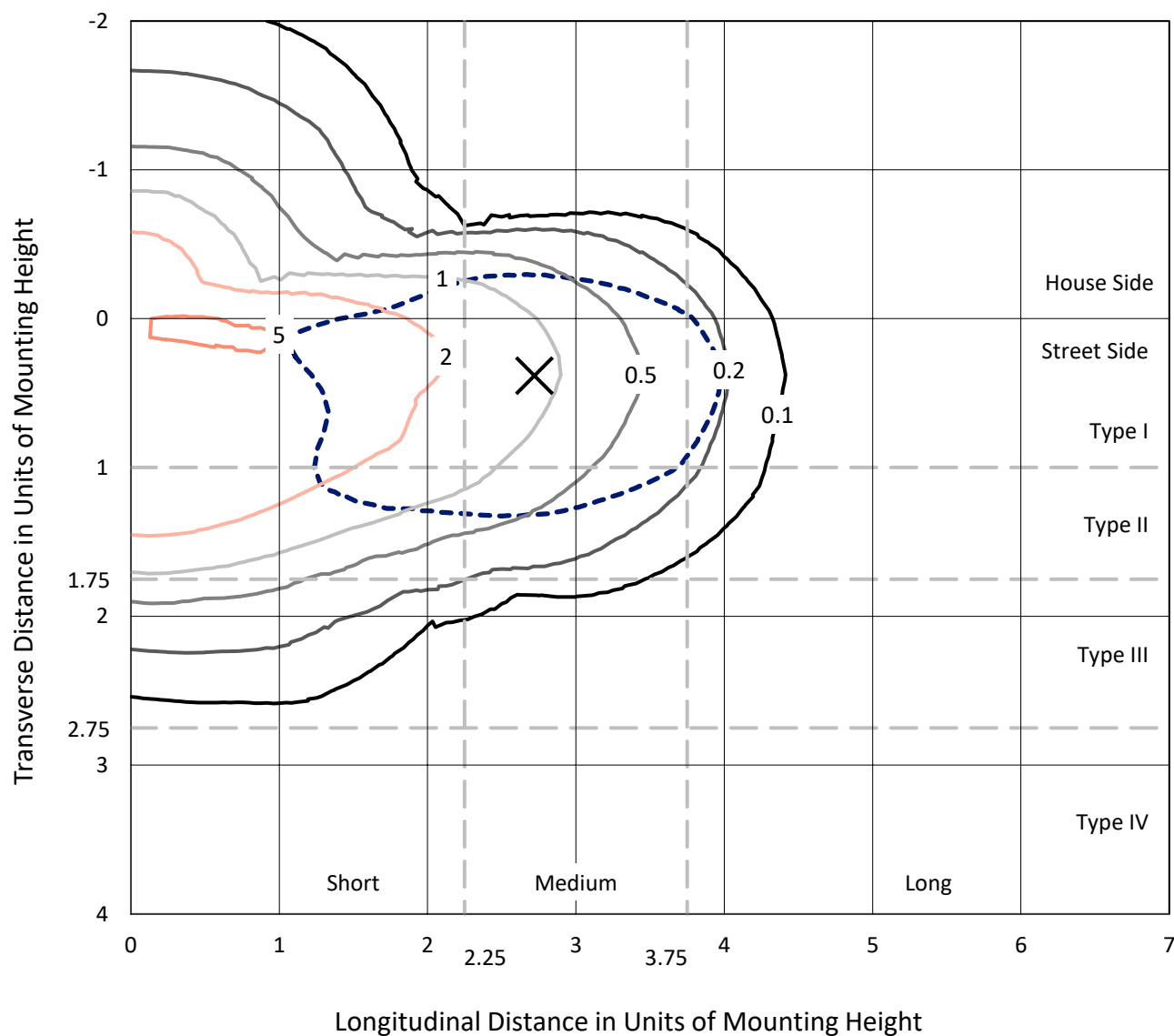
REPORT NUMBER: P967889

CATALOG NUMBER: NAV-SB5A-830-U-T2

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

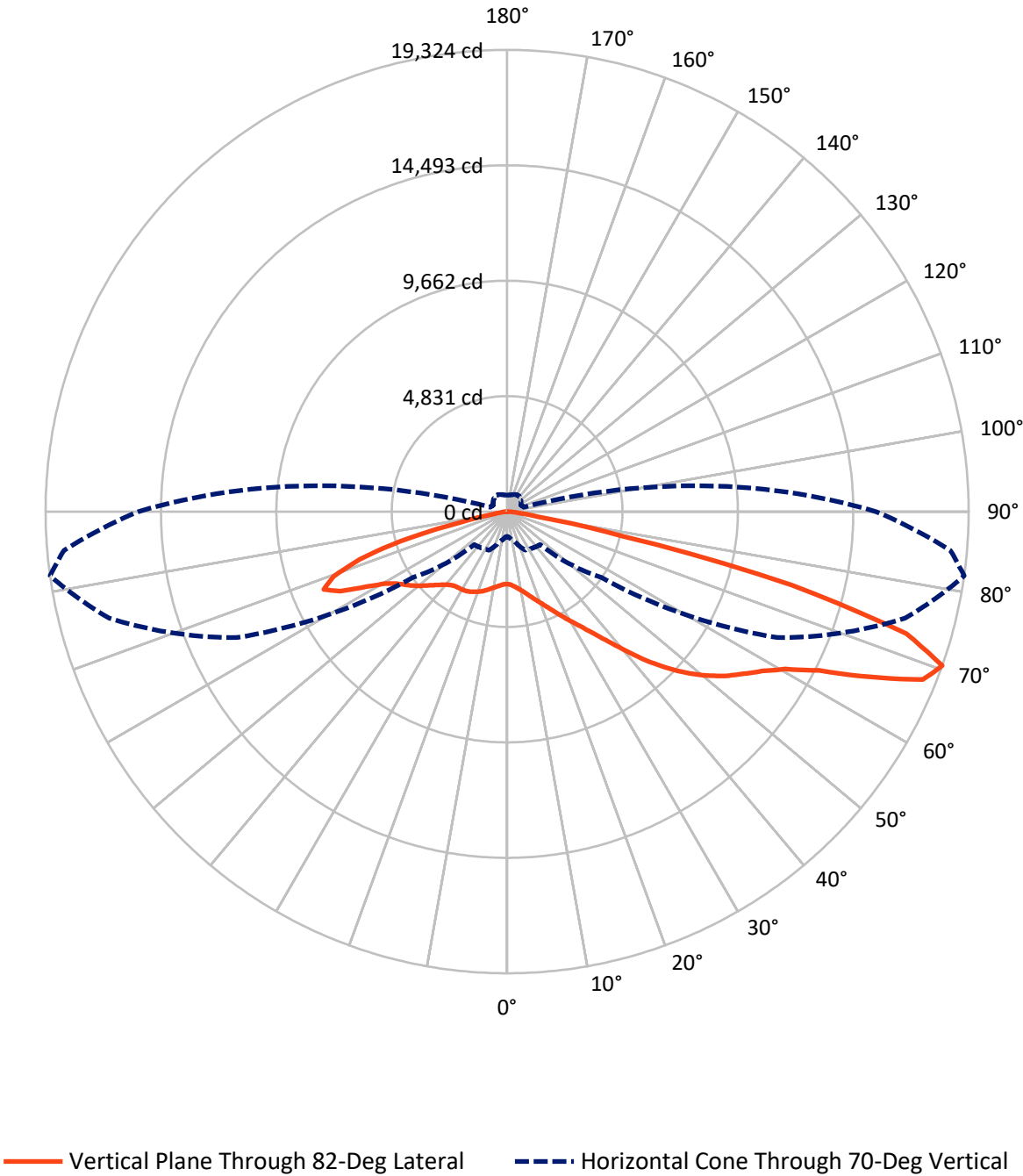
--- 1/2 Max cd



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

REPORT NUMBER: P967889
CATALOG NUMBER: NAV-SB5A-830-U-T2

Luminous Intensity Polar Plot



REPORT NUMBER: P967889

CATALOG NUMBER: NAV-SB5A-830-U-T2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5097.7	0.0	5097.7
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	15580.6	0.0	15580.6
	% Fixture	75.3	0.0	75.3
Total	Lumens	20678.4	0.0	20678.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	286.2	1.4
10°-20°	822.4	4.0
20°-30°	1375.8	6.7
30°-40°	2149.4	10.4
40°-50°	3423.1	16.6
50°-60°	4763.7	23.0
60°-70°	4983.0	24.1
70°-80°	2604.4	12.6
80°-90°	270.4	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°	20678.4	100.0
0°-180°	20678.4	100.0

Coefficient of Utilization



REPORT NUMBER: P967889

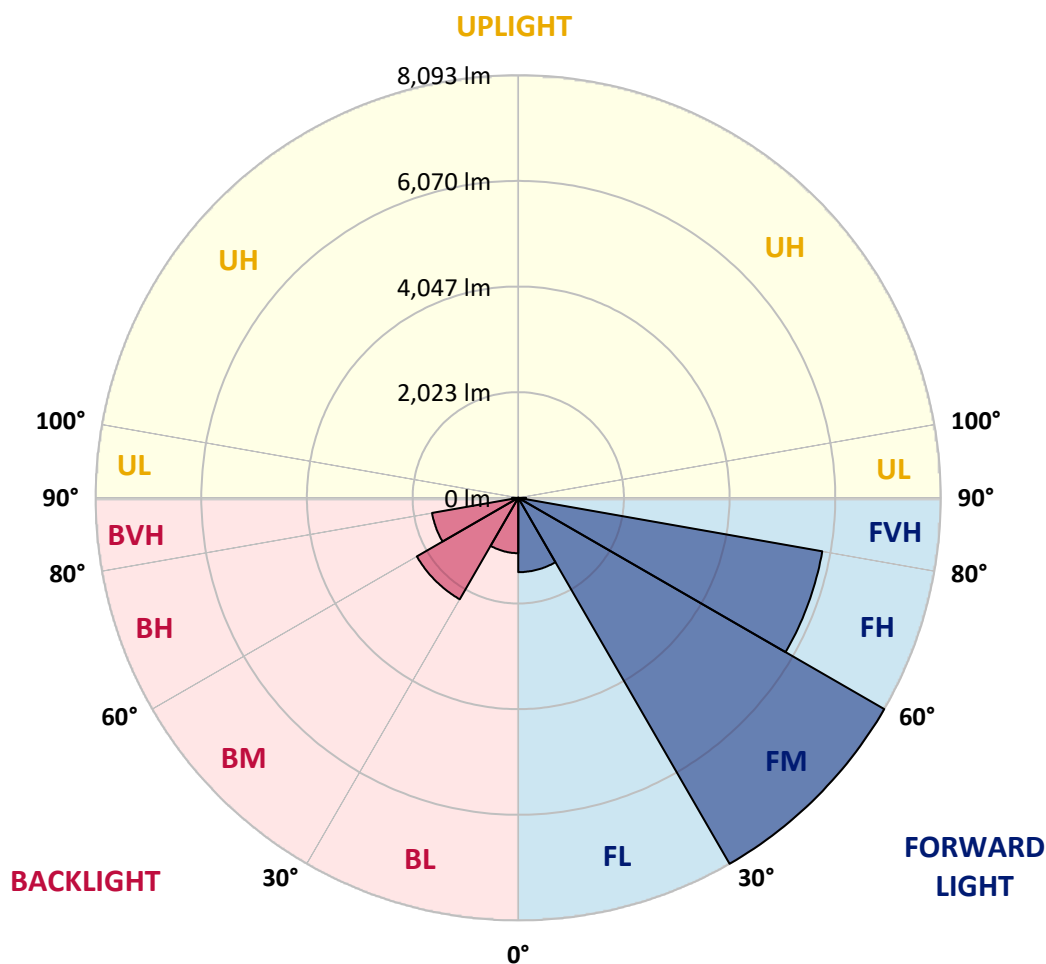
CATALOG NUMBER: NAV-SB5A-830-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1423.9	6.9			
FM	(30°-60°)	8093.3	39.1			
FH	(60°-80°)	5912.0	28.6			G3/7500
FVH	(80°-90°)	151.4	0.7			G2/225
BL	(0°-30°)	1060.5	5.1	B3/2500		
BM	(30°-60°)	2242.8	10.8	B2/2500		
BH	(60°-80°)	1675.4	8.1	B3/2500		G3/2500
BVH	(80°-90°)	119.0	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: P967889

CATALOG NUMBER: NAV-SB5A-830-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3031.7	3031.7	3031.7	3031.7	3031.7	3031.7	3031.7	3031.7	3031.7	3031.7	3031.7
2.5°	3104.1	3121.6	3116.2	3110.7	3110.7	3103.0	3102.0	3091.0	3082.2	3067.9	3064.6
5°	3143.7	3162.2	3160.1	3164.5	3178.7	3182.0	3185.3	3178.7	3161.2	3143.7	3136.0
7.5°	3108.5	3129.3	3136.0	3162.2	3206.2	3245.7	3275.3	3287.4	3270.9	3245.7	3233.6
10°	2990.0	3013.1	3036.0	3098.7	3176.6	3269.9	3348.8	3396.0	3392.7	3368.6	3347.8
12.5°	2749.7	2773.9	2823.3	2945.0	3087.7	3252.2	3399.3	3498.0	3532.0	3514.5	3478.2
15°	2557.7	2578.5	2615.8	2741.0	2926.4	3176.6	3418.0	3609.9	3696.7	3686.7	3642.8
17.5°	2552.2	2561.0	2584.0	2643.3	2786.0	3058.1	3398.2	3719.7	3885.4	3884.2	3829.4
20°	2648.8	2652.1	2665.2	2677.3	2758.5	2968.1	3347.8	3810.7	4097.1	4097.1	4037.9
22.5°	2782.7	2780.4	2793.6	2782.7	2822.1	2960.4	3315.9	3890.9	4333.1	4350.6	4276.0
25°	2983.5	2972.5	2969.1	2943.9	2951.6	3031.7	3351.0	3981.9	4612.8	4649.1	4555.8
27.5°	3251.2	3233.6	3221.6	3163.4	3143.7	3178.7	3458.6	4091.7	4924.5	4987.0	4868.5
30°	3600.1	3568.2	3550.7	3449.7	3378.4	3383.9	3620.9	4237.6	5250.4	5351.3	5201.0
32.5°	4076.3	4026.9	3979.8	3814.0	3683.4	3640.7	3830.5	4439.5	5603.7	5764.9	5571.8
35°	4609.5	4570.1	4519.5	4263.9	4063.1	3964.4	4113.6	4721.5	6017.4	6273.0	6021.7
37.5°	5123.1	5089.0	5113.2	4768.6	4509.7	4366.0	4484.5	5100.0	6527.5	6905.0	6585.7
40°	5654.1	5627.8	5631.0	5301.9	5000.2	4838.9	4934.3	5575.2	7112.4	7656.6	7263.8
42.5°	6231.3	6211.5	6145.7	5853.9	5514.8	5364.4	5452.3	6123.8	7740.0	8512.5	8007.7
45°	6877.5	6865.4	6804.1	6469.4	6080.9	5912.0	6030.5	6729.4	8371.0	9317.9	8754.9
47.5°	7436.1	7445.9	7438.2	7156.2	6753.6	6505.6	6647.1	7361.4	8958.0	10074.9	9471.5
50°	7704.9	7756.5	7832.1	7744.4	7494.2	7241.8	7269.3	7971.5	9517.5	10784.8	10158.4
52.5°	7564.5	7662.1	7868.4	8008.8	8105.4	8052.7	7979.2	8577.2	10044.3	11425.7	10807.9
55°	7041.0	7178.2	7520.5	7859.6	8352.3	8735.3	8831.8	9248.8	10557.7	11989.6	11422.4
57.5°	6087.6	6310.3	6617.5	7303.3	8132.9	9065.5	9825.9	10180.3	11102.0	12592.0	12065.4
60°	4452.6	4751.1	5132.9	6153.4	7364.7	8888.8	10671.9	11611.1	11875.5	13372.2	12902.6
62.5°	2849.6	3033.9	3385.1	4346.2	5738.7	7983.6	10930.8	13399.6	13186.7	14651.6	14157.8
65°	1950.9	2069.4	2390.9	2930.8	3709.8	5942.7	10237.4	14740.4	15269.3	16679.3	16304.1
67.5°	1417.7	1507.7	1782.0	2254.9	2417.3	3516.7	7944.1	14679.0	17293.8	18768.5	18184.7
70°	1033.6	1097.3	1327.7	1782.0	1859.9	1956.4	4812.6	12477.9	17249.9	19323.7	18624.8
72.5°	765.9	809.7	964.5	1382.5	1505.4	1321.1	2382.1	9068.8	14822.7	17478.1	16917.4
75°	554.1	587.0	701.1	1057.8	1204.8	1006.1	1188.3	5299.8	10339.4	12294.7	12393.5
77.5°	423.5	448.7	523.4	774.7	964.5	754.9	737.4	2438.1	4902.5	4926.7	5203.2
80°	340.2	356.6	397.2	545.3	739.5	565.1	480.6	984.2	1549.3	1311.2	1376.0
82.5°	250.2	277.6	335.8	382.9	528.9	389.5	292.9	497.0	589.3	507.0	511.3
85°	142.7	161.3	203.0	274.3	337.9	238.1	167.9	220.6	274.3	225.0	200.8
87.5°	50.4	65.8	71.3	107.5	147.0	98.7	64.8	63.7	90.0	66.9	56.0
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: P967889

CATALOG NUMBER: NAV-SB5A-830-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3031.7	3031.7	3031.7	3031.7	3031.7	3031.7	3031.7	3031.7	3031.7	3031.7	3031.7
2.5°	3053.7	3048.1	3026.2	2996.6	2965.8	2936.2	2926.4	2905.6	2891.2	2883.5	2892.3
5°	3115.1	3097.5	3046.0	2980.1	2911.0	2836.4	2783.7	2735.4	2700.4	2667.5	2680.6
7.5°	3202.9	3172.2	3083.3	2968.1	2845.2	2721.2	2629.0	2558.8	2511.6	2480.9	2487.5
10°	3304.9	3257.8	3121.6	2949.4	2759.6	2581.9	2473.2	2412.8	2383.2	2366.7	2371.1
12.5°	3422.4	3355.4	3161.2	2906.6	2629.0	2426.1	2351.5	2333.8	2335.0	2336.1	2338.2
15°	3567.2	3473.9	3193.0	2813.3	2459.0	2306.5	2293.2	2321.8	2351.5	2365.7	2364.6
17.5°	3730.7	3599.0	3198.5	2659.8	2292.2	2229.6	2271.3	2332.8	2377.7	2397.5	2401.9
20°	3906.2	3726.3	3158.9	2442.5	2155.0	2167.1	2241.7	2320.7	2370.1	2395.3	2401.9
22.5°	4107.0	3862.3	3064.6	2214.2	2043.1	2099.0	2186.8	2263.6	2315.2	2340.5	2347.0
25°	4336.4	4014.8	2916.5	2022.2	1946.5	2022.2	2110.1	2173.6	2215.3	2238.4	2245.0
27.5°	4590.9	4173.9	2719.0	1869.7	1862.0	1943.2	2015.7	2065.1	2087.0	2104.5	2111.1
30°	4846.5	4318.7	2479.8	1754.5	1788.5	1865.3	1916.9	1938.9	1945.4	1948.7	1956.4
32.5°	5123.1	4443.9	2228.6	1659.1	1718.3	1789.6	1820.3	1830.2	1799.5	1778.7	1785.2
35°	5457.7	4577.8	1982.8	1583.3	1649.1	1710.6	1720.5	1711.7	1675.5	1632.7	1634.9
37.5°	5871.4	4744.5	1786.4	1529.6	1584.4	1625.0	1612.9	1610.8	1614.1	1563.5	1566.9
40°	6378.4	4961.8	1642.6	1487.9	1531.8	1540.6	1506.5	1525.2	1541.6	1464.8	1467.0
42.5°	6941.2	5224.0	1551.5	1459.4	1487.9	1467.0	1414.4	1435.2	1433.1	1332.1	1331.0
45°	7515.1	5509.3	1519.7	1438.5	1447.3	1405.6	1347.5	1352.9	1306.9	1215.8	1219.0
47.5°	8085.6	5815.4	1539.4	1421.0	1396.8	1349.6	1304.6	1280.5	1212.5	1144.4	1144.4
50°	8645.3	6136.9	1611.8	1385.8	1327.7	1300.2	1267.3	1224.6	1152.1	1094.0	1089.6
52.5°	9164.2	6460.6	1693.1	1327.7	1241.0	1257.5	1236.6	1187.3	1115.9	1056.7	1057.8
55°	9655.8	6784.3	1724.9	1247.5	1159.8	1220.2	1208.1	1117.0	1031.5	983.2	978.8
57.5°	10191.3	7173.9	1689.8	1145.5	1094.0	1177.3	1131.3	1030.3	980.9	944.7	941.5
60°	10933.1	7785.0	1614.1	1019.4	1031.5	1113.7	1034.7	993.0	939.2	898.6	896.5
62.5°	12165.2	8925.1	1492.3	894.2	957.9	1019.4	988.6	946.9	892.1	852.6	852.6
65°	13986.6	10509.4	1262.9	796.6	875.7	927.2	939.2	897.6	840.5	798.8	801.0
67.5°	15522.8	11503.6	955.7	715.4	791.1	852.6	886.6	845.9	785.7	745.1	746.1
70°	15438.3	10781.6	729.7	635.3	716.5	779.0	823.0	791.1	726.4	688.0	691.3
72.5°	13712.3	9019.4	590.3	554.1	640.8	702.2	754.9	730.7	664.9	627.6	627.6
75°	10073.9	6402.5	471.8	471.8	546.4	622.2	680.3	664.9	604.5	578.2	570.6
77.5°	4246.4	2686.1	369.8	391.8	454.3	534.3	606.8	612.2	559.5	592.6	537.6
80°	1129.0	740.7	282.0	308.3	356.6	441.1	527.8	525.6	468.5	437.8	407.1
82.5°	430.1	291.9	200.8	217.3	257.9	337.9	418.1	431.2	374.1	323.7	323.7
85°	165.6	125.0	124.0	130.6	150.4	223.9	316.0	327.0	282.0	239.2	246.9
87.5°	42.7	37.3	46.1	43.9	69.1	119.6	181.0	187.7	172.3	99.8	142.7
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)