

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: P883907

Luminaire Tested: **NAV-SB4C-722-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883907
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-SB4C-722-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 2200K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23964 lumens
Efficiency: N/A
Efficacy: 119.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

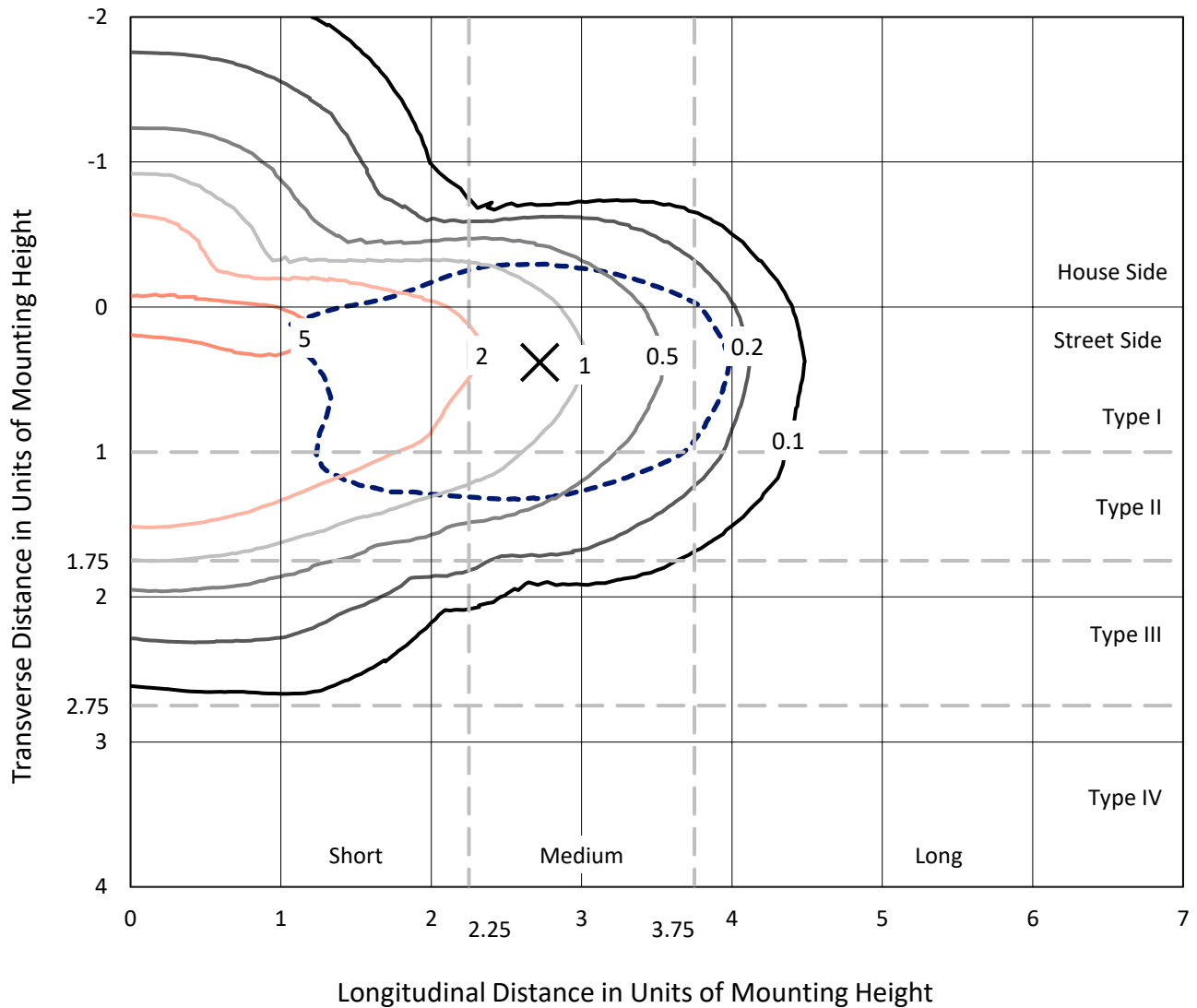
Input Watts (W): 200.7
Input Voltage (V): 120.0
Input Current (Ain): 1.714
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

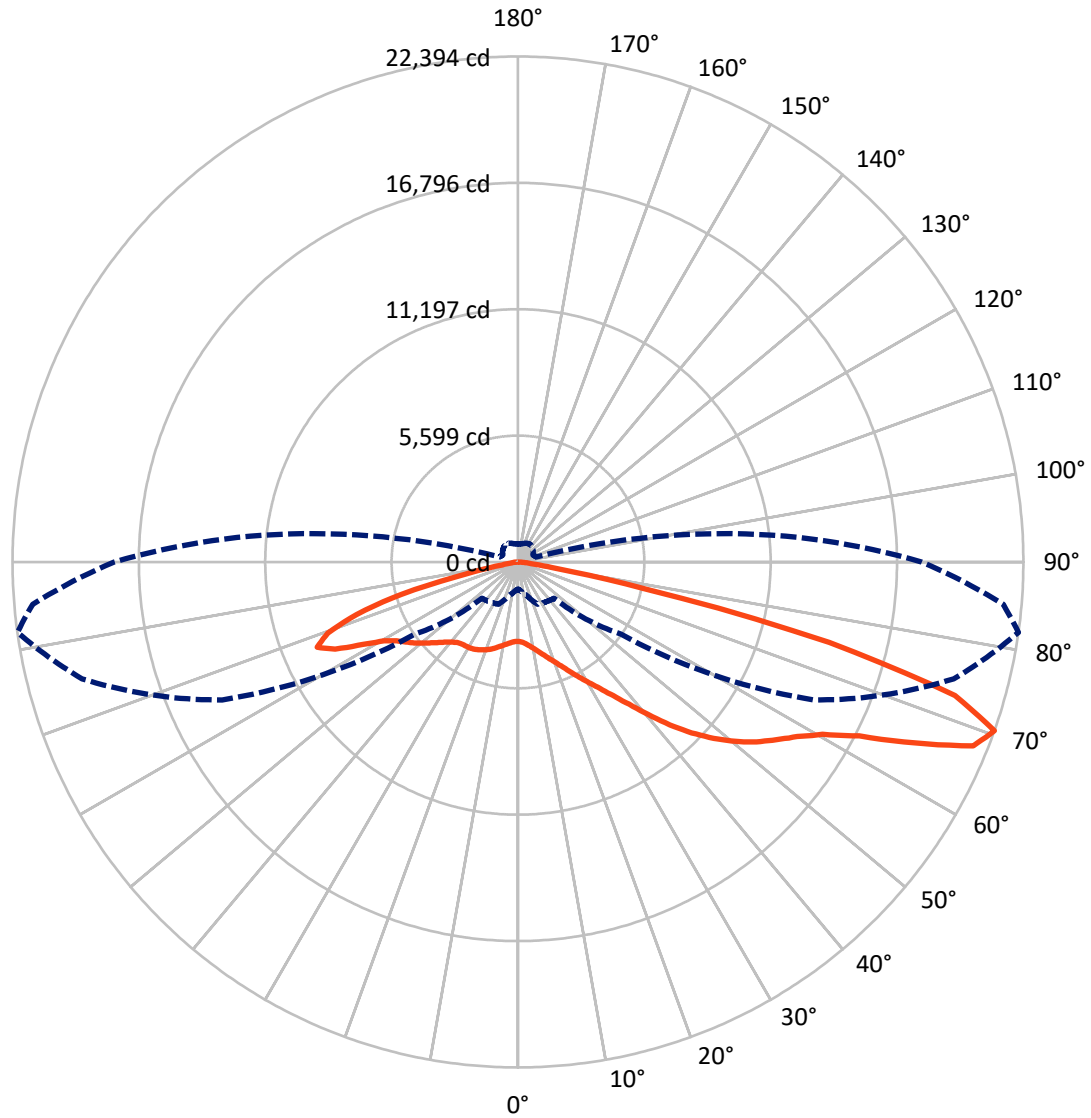
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5907.7	0.0	5907.7
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	18056.3	0.0	18056.3
	% Fixture	75.3	0.0	75.3
Total	Lumens	23964.0	0.0	23964.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	331.7	1.4
10°-20°	953.1	4.0
20°-30°	1594.4	6.7
30°-40°	2490.9	10.4
40°-50°	3967.0	16.6
50°-60°	5520.6	23.0
60°-70°	5774.8	24.1
70°-80°	3018.2	12.6
80°-90°	313.4	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°	23964.0	100.0
0°-180°	23964.0	100.0

Coefficient of Utilization



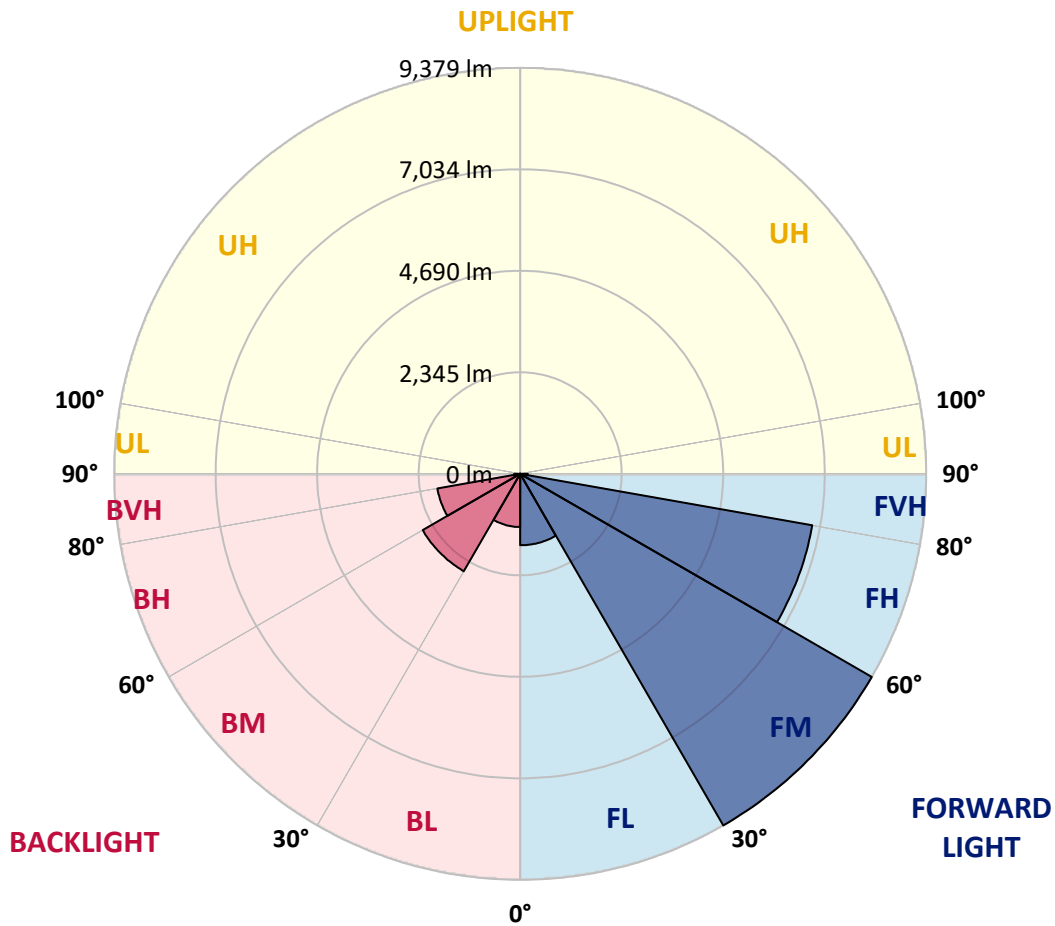
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1650.2	6.9			
FM (30°-60°)	9379.3	39.1			
FH (60°-80°)	6851.4	28.6			G3/7500
FVH (80°-90°)	175.4	0.7			G2/225
BL (0°-30°)	1229.0	5.1	B3/2500		
BM (30°-60°)	2599.2	10.8	B3/5000		
BH (60°-80°)	1941.6	8.1	B3/2500		G3/2500
BVH (80°-90°)	138.0	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



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3513.4	3513.4	3513.4	3513.4	3513.4	3513.4	3513.4	3513.4	3513.4	3513.4	3513.4
2.5°	3597.3	3617.7	3611.3	3605.0	3605.0	3596.1	3594.8	3582.1	3571.9	3555.4	3551.6
5°	3643.1	3664.7	3662.2	3667.3	3683.8	3687.6	3691.4	3683.8	3663.5	3643.1	3634.2
7.5°	3602.4	3626.6	3634.2	3664.7	3715.6	3761.4	3795.7	3809.7	3790.6	3761.4	3747.4
10°	3465.1	3491.8	3518.5	3591.0	3681.3	3789.4	3880.9	3935.6	3931.8	3903.8	3879.6
12.5°	3186.6	3214.6	3271.8	3413.0	3578.3	3769.0	3939.4	4053.9	4093.3	4072.9	4031.0
15°	2964.1	2988.3	3031.5	3176.4	3391.3	3681.3	3961.0	4183.6	4284.0	4272.6	4221.7
17.5°	2957.7	2967.9	2994.6	3063.3	3228.6	3543.9	3938.1	4310.7	4502.7	4501.5	4437.9
20°	3069.6	3073.4	3088.7	3102.7	3196.8	3439.7	3879.6	4416.3	4748.1	4748.1	4679.5
22.5°	3224.8	3222.2	3237.5	3224.8	3270.5	3430.8	3842.8	4509.1	5021.5	5041.9	4955.4
25°	3457.5	3444.8	3440.9	3411.7	3420.6	3513.4	3883.5	4614.6	5345.8	5387.8	5279.7
27.5°	3767.7	3747.4	3733.4	3666.0	3643.1	3683.8	4008.1	4741.8	5706.9	5779.4	5642.1
30°	4172.1	4135.2	4114.9	3997.9	3915.2	3921.6	4196.3	4910.9	6084.6	6201.6	6027.4
32.5°	4724.0	4666.8	4612.1	4420.1	4268.8	4219.2	4439.1	5144.9	6494.0	6681.0	6457.2
35°	5342.0	5296.2	5237.7	4941.4	4708.7	4594.3	4767.2	5471.7	6973.4	7269.7	6978.5
37.5°	5937.1	5897.7	5925.6	5526.4	5226.3	5059.7	5197.0	5910.4	7564.7	8002.2	7632.1
40°	6552.5	6522.0	6525.8	6144.4	5794.7	5607.7	5718.4	6461.0	8242.5	8873.2	8418.0
42.5°	7221.4	7198.5	7122.2	6784.0	6391.0	6216.8	6318.6	7096.8	8969.8	9865.0	9280.1
45°	7970.4	7956.4	7885.2	7497.3	7047.2	6851.4	6988.7	7798.7	9701.0	10798.4	10146.1
47.5°	8617.6	8629.1	8620.2	8293.4	7826.7	7539.3	7703.3	8531.1	10381.3	11675.8	10976.4
50°	8929.2	8988.9	9076.7	8974.9	8685.0	8392.5	8424.3	9238.2	11029.8	12498.5	11772.4
52.5°	8766.4	8879.6	9118.6	9281.4	9393.3	9332.2	9247.1	9940.1	11640.2	13241.1	12525.2
55°	8159.8	8318.8	8715.5	9108.4	9679.4	10123.2	10235.1	10718.3	12235.3	13894.7	13237.3
57.5°	7054.8	7313.0	7669.0	8463.7	9425.1	10505.9	11387.1	11797.9	12866.0	14592.8	13982.5
60°	5160.1	5506.0	5948.5	7131.1	8535.0	10301.2	12367.6	13456.0	13762.5	15497.0	14952.7
62.5°	3302.3	3516.0	3922.9	5036.8	6650.5	9252.1	12667.6	15528.7	15282.1	16979.6	16407.4
65°	2260.9	2398.2	2770.8	3396.4	4299.3	6887.0	11864.0	17082.6	17695.5	19329.5	18894.7
67.5°	1642.9	1747.2	2065.1	2613.1	2801.3	4075.5	9206.4	17011.4	20041.6	21750.7	21074.2
70°	1197.8	1271.6	1538.6	2065.1	2155.4	2267.3	5577.2	14460.6	19990.8	22394.1	21584.1
72.5°	887.6	938.4	1117.7	1602.2	1744.6	1531.0	2760.6	10509.7	17178.0	20255.3	19605.5
75°	642.2	680.3	812.6	1225.8	1396.2	1166.1	1377.1	6141.8	11982.3	14248.2	14362.7
77.5°	490.8	520.1	606.6	897.7	1117.7	874.9	854.5	2825.5	5681.5	5709.5	6029.9
80°	394.2	413.3	460.3	632.0	857.1	654.9	557.0	1140.6	1795.5	1519.6	1594.6
82.5°	289.9	321.7	389.1	443.8	612.9	451.4	339.5	576.0	682.8	587.5	592.6
85°	165.3	186.9	235.2	317.9	391.7	275.9	194.6	255.6	317.9	260.7	232.7
87.5°	58.5	76.3	82.7	124.6	170.4	114.4	75.0	73.8	104.3	77.6	64.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3513.4	3513.4	3513.4	3513.4	3513.4	3513.4	3513.4	3513.4	3513.4	3513.4	3513.4
2.5°	3538.9	3532.5	3507.1	3472.7	3437.1	3402.8	3391.3	3367.2	3350.7	3341.8	3351.9
5°	3610.1	3589.7	3530.0	3453.7	3373.5	3287.1	3226.0	3170.1	3129.4	3091.3	3106.5
7.5°	3711.8	3676.2	3573.2	3439.7	3297.3	3153.6	3046.7	2965.4	2910.7	2875.1	2882.7
10°	3830.0	3775.4	3617.7	3418.1	3198.1	2992.1	2866.2	2796.2	2761.9	2742.8	2747.9
12.5°	3966.1	3888.5	3663.5	3368.5	3046.7	2811.5	2725.0	2704.7	2706.0	2707.2	2709.8
15°	4134.0	4025.9	3700.3	3260.4	2849.6	2672.9	2657.6	2690.7	2725.0	2741.6	2740.3
17.5°	4323.4	4170.8	3706.7	3082.4	2656.4	2583.9	2632.2	2703.4	2755.6	2778.4	2783.5
20°	4526.9	4318.3	3660.9	2830.6	2497.4	2511.4	2597.9	2689.4	2746.6	2775.9	2783.5
22.5°	4759.6	4476.0	3551.6	2566.1	2367.7	2432.6	2534.3	2623.3	2683.1	2712.3	2719.9
25°	5025.4	4652.8	3379.9	2343.6	2255.8	2343.6	2445.3	2519.0	2567.4	2594.1	2601.7
27.5°	5320.4	4837.2	3151.0	2166.8	2157.9	2252.0	2335.9	2393.1	2418.6	2438.9	2446.6
30°	5616.6	5005.0	2873.8	2033.3	2072.7	2161.7	2221.5	2246.9	2254.5	2258.4	2267.3
32.5°	5937.1	5150.0	2582.6	1922.7	1991.3	2074.0	2109.6	2121.0	2085.4	2061.3	2068.9
35°	6324.9	5305.1	2297.8	1834.9	1911.2	1982.4	1993.9	1983.7	1941.7	1892.1	1894.7
37.5°	6804.3	5498.4	2070.2	1772.6	1836.2	1883.2	1869.2	1866.7	1870.5	1812.0	1815.8
40°	7391.8	5750.2	1903.6	1724.3	1775.1	1785.3	1745.9	1767.5	1786.6	1697.6	1700.1
42.5°	8044.1	6054.1	1798.0	1691.2	1724.3	1700.1	1639.1	1663.2	1660.7	1543.7	1542.4
45°	8709.2	6384.7	1761.2	1667.1	1677.2	1628.9	1561.5	1567.9	1514.5	1408.9	1412.7
47.5°	9370.4	6739.5	1784.1	1646.7	1618.7	1564.1	1511.9	1484.0	1405.1	1326.3	1326.3
50°	10018.9	7112.0	1868.0	1606.0	1538.6	1506.8	1468.7	1419.1	1335.2	1267.8	1262.7
52.5°	10620.4	7487.2	1962.1	1538.6	1438.2	1457.2	1433.1	1375.9	1293.2	1224.5	1225.8
55°	11190.1	7862.3	1999.0	1445.8	1344.1	1414.0	1400.0	1294.5	1195.3	1139.4	1134.3
57.5°	11810.6	8313.7	1958.3	1327.5	1267.8	1364.4	1311.0	1194.0	1136.8	1094.8	1091.0
60°	12670.2	9022.0	1870.5	1181.3	1195.3	1290.7	1199.1	1150.8	1088.5	1041.4	1038.9
62.5°	14098.2	10343.2	1729.4	1036.4	1110.1	1181.3	1145.7	1097.4	1033.8	988.0	988.0
65°	16209.0	12179.4	1463.6	923.2	1014.7	1074.5	1088.5	1040.2	974.0	925.7	928.3
67.5°	17989.3	13331.4	1107.6	829.1	916.8	988.0	1027.5	980.4	910.5	863.4	864.7
70°	17891.4	12494.7	845.6	736.3	830.4	902.8	953.7	916.8	841.8	797.3	801.1
72.5°	15891.1	10452.5	684.1	642.2	742.6	813.8	874.9	846.9	770.6	727.4	727.4
75°	11674.5	7419.8	546.8	546.8	633.3	721.0	788.4	770.6	700.6	670.1	661.2
77.5°	4921.1	3112.9	428.5	454.0	526.4	619.3	703.2	709.6	648.5	686.7	623.1
80°	1308.5	858.3	326.8	357.3	413.3	511.2	611.6	609.1	543.0	507.4	471.8
82.5°	498.5	338.2	232.7	251.8	298.8	391.7	484.5	499.7	433.6	375.1	375.1
85°	192.0	145.0	143.7	151.3	174.2	259.4	366.2	378.9	326.8	277.2	286.1
87.5°	49.6	43.2	53.4	50.9	80.1	138.6	209.8	217.4	199.6	115.7	165.3
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)