

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: P883477

Luminaire Tested: **NAV-SB3D-830-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883477  
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-SB3D-830-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

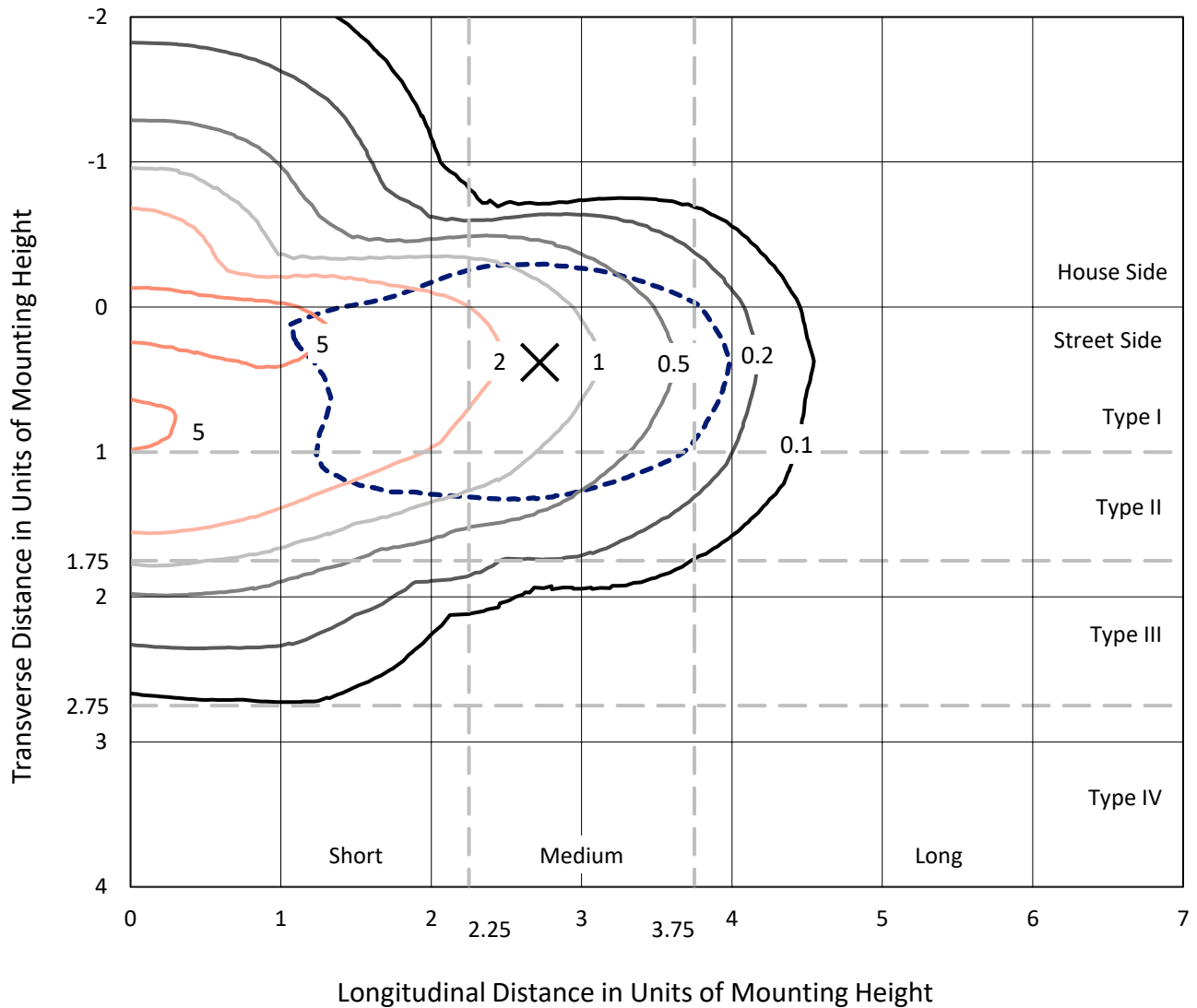
Lumens per Lamp: N/A  
Luminaire Lumens: 26463 lumens  
Efficiency: N/A  
Efficacy: 121.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 218.1  
Input Voltage (V): 120.0  
Input Current (Ain): 1.84  
Voltage Rise (V): NR  
Power Factor: 0.998  
Total Harmonic Distortion (THDi): 2.542  
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

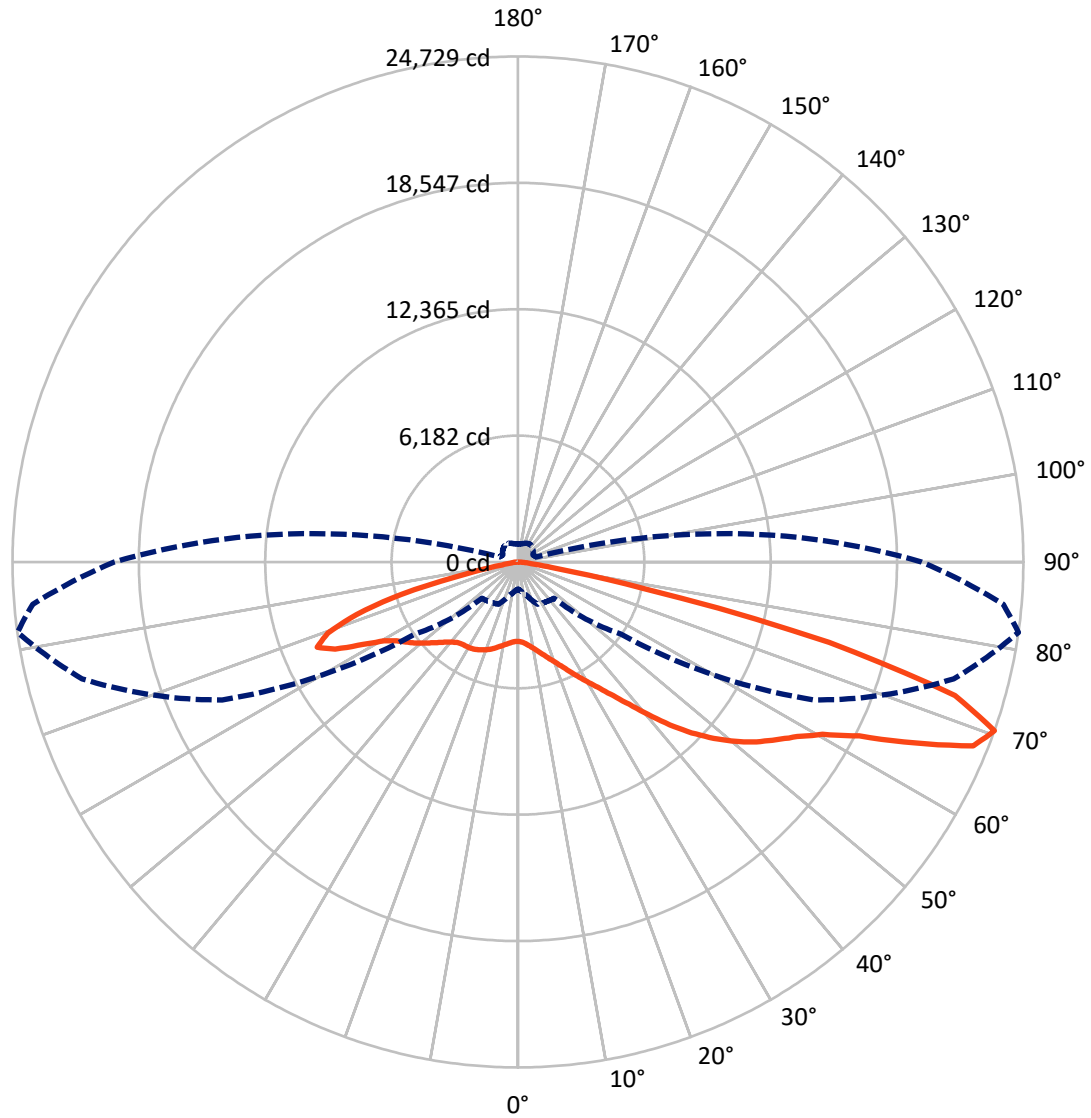
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 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
<b>House Side</b>	Lumens	6523.8	0.0	6523.8
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	19939.2	0.0	19939.2
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	26463.0	0.0	26463.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	366.3	1.4
10°-20°	1052.5	4.0
20°-30°	1760.7	6.7
30°-40°	2750.6	10.4
40°-50°	4380.7	16.6
50°-60°	6096.3	23.0
60°-70°	6377.0	24.1
70°-80°	3332.9	12.6
80°-90°	346.1	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°	26463.0	100.0
0°-180°	26463.0	100.0

**Coefficient of Utilization**



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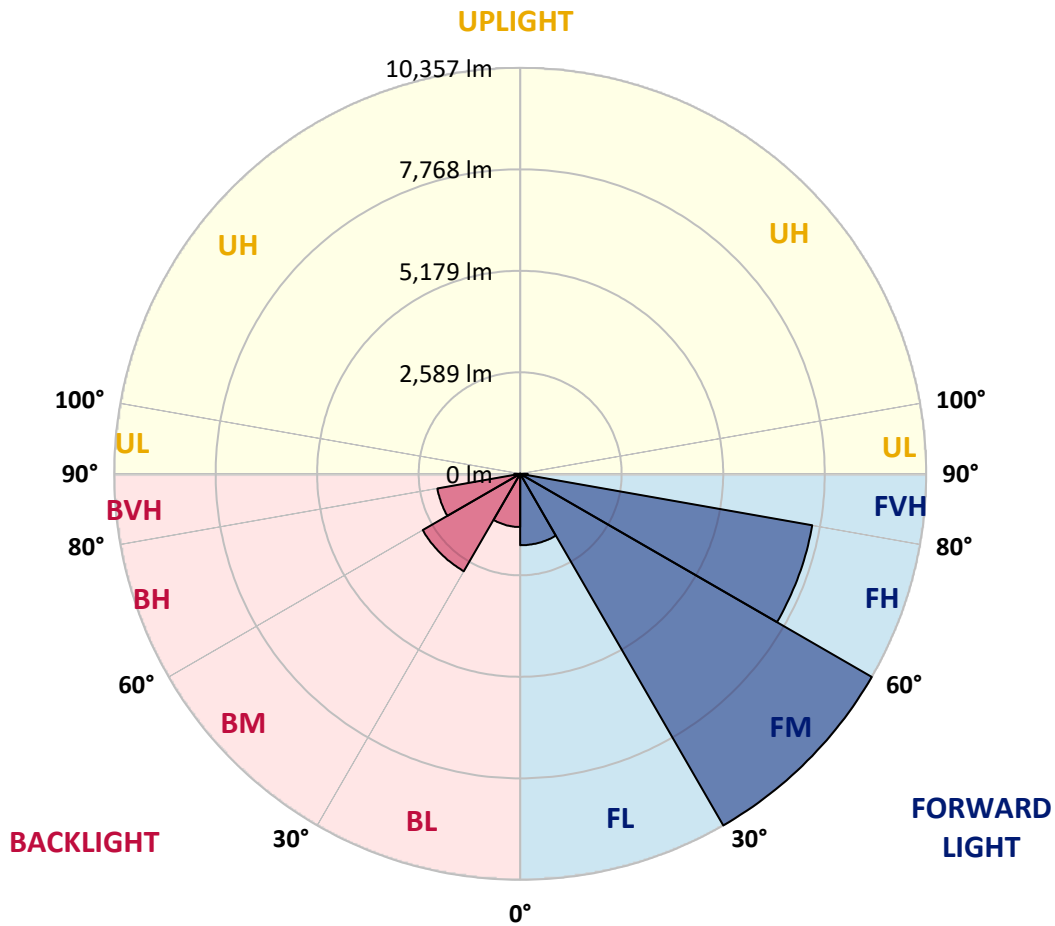
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1822.3	6.9			
FM (30°-60°)	10357.3	39.1			
FH (60°-80°)	7565.9	28.6			G4/12000
FVH (80°-90°)	193.7	0.7			G2/225
BL (0°-30°)	1357.2	5.1	B3/2500		
BM (30°-60°)	2870.2	10.8	B3/5000		
BH (60°-80°)	2144.0	8.1	B3/2500		G3/2500
BVH (80°-90°)	152.4	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 II Medium



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3879.8	3879.8	3879.8	3879.8	3879.8	3879.8	3879.8	3879.8	3879.8	3879.8	3879.8
2.5°	3972.5	3995.0	3987.9	3980.9	3980.9	3971.1	3969.7	3955.6	3944.4	3926.1	3921.9
5°	4023.0	4046.9	4044.1	4049.7	4068.0	4072.2	4076.4	4068.0	4045.5	4023.0	4013.2
7.5°	3978.1	4004.8	4013.2	4046.9	4103.1	4153.6	4191.5	4207.0	4185.9	4153.6	4138.2
10°	3826.4	3855.9	3885.4	3965.5	4065.2	4184.5	4285.6	4346.0	4341.8	4310.9	4284.2
12.5°	3518.9	3549.8	3613.0	3768.9	3951.4	4162.1	4350.2	4476.6	4520.1	4497.7	4451.3
15°	3273.2	3299.9	3347.6	3507.7	3745.0	4065.2	4374.1	4619.8	4730.8	4718.1	4661.9
17.5°	3266.2	3277.4	3306.9	3382.7	3565.3	3913.5	4348.8	4760.2	4972.3	4970.9	4900.7
20°	3389.7	3394.0	3410.8	3426.2	3530.2	3798.4	4284.2	4876.8	5243.3	5243.3	5167.5
22.5°	3561.1	3558.2	3575.1	3561.1	3611.6	3788.5	4243.5	4979.3	5545.2	5567.7	5472.2
25°	3818.0	3804.0	3799.8	3767.5	3777.3	3879.8	4288.4	5095.8	5903.3	5949.6	5830.2
27.5°	4160.6	4138.2	4122.7	4048.3	4023.0	4068.0	4426.0	5236.3	6302.1	6382.1	6230.4
30°	4607.2	4566.5	4544.0	4414.8	4323.5	4330.6	4633.9	5423.0	6719.1	6848.3	6655.9
32.5°	5216.6	5153.4	5093.0	4881.0	4713.9	4659.1	4902.1	5681.4	7171.3	7377.7	7130.5
35°	5899.0	5848.5	5783.9	5456.7	5199.8	5073.4	5264.3	6042.3	7700.6	8027.8	7706.3
37.5°	6556.2	6512.7	6543.6	6102.7	5771.3	5587.3	5739.0	6526.7	8353.6	8836.6	8428.0
40°	7235.8	7202.1	7206.4	6785.1	6398.9	6192.5	6314.7	7134.7	9102.0	9798.5	9295.8
42.5°	7974.5	7949.2	7864.9	7491.4	7057.5	6865.1	6977.5	7836.8	9905.2	10893.8	10247.9
45°	8801.5	8786.1	8707.4	8279.2	7782.1	7565.8	7717.5	8612.0	10712.6	11924.5	11204.1
47.5°	9516.3	9528.9	9519.1	9158.2	8642.9	8325.5	8506.6	9420.8	11463.9	12893.4	12121.1
50°	9860.3	9926.3	10023.2	9910.8	9590.7	9267.7	9302.8	10201.5	12180.0	13801.9	13000.1
52.5°	9680.6	9805.5	10069.5	10249.3	10372.8	10305.4	10211.3	10976.6	12854.1	14621.9	13831.4
55°	9010.8	9186.3	9624.4	10058.3	10688.8	11178.8	11302.4	11836.0	13511.2	15343.7	14617.7
57.5°	7790.5	8075.6	8468.7	9346.4	10407.9	11601.5	12574.6	13028.2	14207.7	16114.6	15440.6
60°	5698.2	6080.2	6568.9	7874.8	9425.0	11375.4	13657.3	14859.3	15197.7	17113.0	16512.0
62.5°	3646.7	3882.6	4332.0	5562.0	7344.0	10217.0	13988.6	17148.1	16875.7	18750.3	18118.4
65°	2496.7	2648.3	3059.8	3750.6	4747.6	7605.2	13101.2	18864.0	19540.9	21345.3	20865.0
67.5°	1814.2	1929.4	2280.4	2885.6	3093.5	4500.5	10166.4	18785.4	22131.6	24018.9	23271.8
70°	1322.8	1404.2	1699.1	2280.4	2380.1	2503.7	6158.8	15968.6	22075.4	24729.4	23834.9
72.5°	980.1	1036.3	1234.3	1769.3	1926.6	1690.7	3048.5	11605.7	18969.3	22367.5	21650.0
75°	709.1	751.2	897.3	1353.6	1541.8	1287.7	1520.7	6782.3	13231.8	15734.1	15860.4
77.5°	542.0	574.3	669.8	991.4	1234.3	966.1	943.6	3120.1	6274.0	6304.9	6658.7
80°	435.3	456.4	508.3	697.9	946.4	723.2	615.0	1259.6	1982.7	1678.0	1760.9
82.5°	320.2	355.3	429.7	490.1	676.8	498.5	374.9	636.1	754.1	648.7	654.4
85°	182.5	206.4	259.8	351.1	432.5	304.7	214.8	282.2	351.1	287.9	257.0
87.5°	64.6	84.3	91.3	137.6	188.2	126.4	82.8	81.4	115.1	85.7	71.6
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°	3879.8	3879.8	3879.8	3879.8	3879.8	3879.8	3879.8	3879.8	3879.8	3879.8	3879.8
2.5°	3907.9	3900.9	3872.8	3834.9	3795.6	3757.6	3745.0	3718.3	3700.1	3690.2	3701.5
5°	3986.5	3964.1	3898.1	3813.8	3725.3	3629.9	3562.5	3500.7	3455.7	3413.6	3430.5
7.5°	4098.9	4059.5	3945.8	3798.4	3641.1	3482.4	3364.5	3274.6	3214.2	3174.9	3183.3
10°	4229.5	4169.1	3995.0	3774.5	3531.6	3304.1	3165.1	3087.8	3049.9	3028.9	3034.5
12.5°	4379.7	4294.0	4045.5	3719.7	3364.5	3104.7	3009.2	2986.7	2988.1	2989.5	2992.4
15°	4565.1	4445.7	4086.2	3600.4	3146.8	2951.6	2934.8	2971.3	3009.2	3027.5	3026.1
17.5°	4774.3	4605.8	4093.2	3403.8	2933.4	2853.3	2906.7	2985.3	3042.9	3068.2	3073.8
20°	4999.0	4768.7	4042.7	3125.8	2757.9	2773.3	2868.8	2969.9	3033.1	3065.4	3073.8
22.5°	5255.9	4942.8	3921.9	2833.7	2614.6	2686.2	2798.6	2896.9	2962.9	2995.2	3003.6
25°	5549.4	5138.0	3732.4	2587.9	2491.1	2587.9	2700.3	2781.7	2835.1	2864.6	2873.0
27.5°	5875.2	5341.6	3479.6	2392.8	2382.9	2486.8	2579.5	2642.7	2670.8	2693.3	2701.7
30°	6202.4	5526.9	3173.5	2245.3	2288.8	2387.1	2453.1	2481.2	2489.6	2493.9	2503.7
32.5°	6556.2	5687.0	2851.9	2123.2	2199.0	2290.3	2329.6	2342.2	2302.9	2276.2	2284.6
35°	6984.5	5858.3	2537.4	2026.3	2110.5	2189.1	2201.8	2190.6	2144.2	2089.5	2092.3
37.5°	7513.9	6071.8	2286.0	1957.5	2027.7	2079.6	2064.2	2061.4	2065.6	2001.0	2005.2
40°	8162.6	6349.8	2102.1	1904.1	1960.3	1971.5	1928.0	1951.8	1972.9	1874.6	1877.4
42.5°	8883.0	6685.4	1985.5	1867.6	1904.1	1877.4	1810.0	1836.7	1833.9	1704.7	1703.3
45°	9617.4	7050.5	1944.8	1840.9	1852.1	1798.8	1724.4	1731.4	1672.4	1555.9	1560.1
47.5°	10347.6	7442.3	1970.1	1818.4	1787.5	1727.2	1669.6	1638.7	1551.6	1464.6	1464.6
50°	11063.7	7853.7	2062.8	1773.5	1699.1	1664.0	1621.9	1567.1	1474.4	1400.0	1394.4
52.5°	11727.9	8267.9	2166.7	1699.1	1588.2	1609.2	1582.5	1519.3	1428.1	1352.2	1353.6
55°	12357.0	8682.2	2207.4	1596.6	1484.2	1561.5	1546.0	1429.5	1319.9	1258.2	1252.5
57.5°	13042.2	9180.7	2162.5	1466.0	1400.0	1506.7	1447.7	1318.5	1255.4	1209.0	1204.8
60°	13991.5	9962.8	2065.6	1304.5	1319.9	1425.3	1324.2	1270.8	1202.0	1150.0	1147.2
62.5°	15568.4	11421.8	1909.7	1144.4	1225.9	1304.5	1265.2	1211.8	1141.6	1091.1	1091.1
65°	17899.3	13449.4	1616.2	1019.4	1120.6	1186.5	1202.0	1148.6	1075.6	1022.3	1025.1
67.5°	19865.2	14721.6	1223.1	915.5	1012.4	1091.1	1134.6	1082.6	1005.4	953.5	954.9
70°	19757.1	13797.7	933.8	813.0	916.9	997.0	1053.2	1012.4	929.6	880.4	884.6
72.5°	17548.3	11542.5	755.5	709.1	820.1	898.7	966.1	935.2	850.9	803.2	803.2
75°	12892.0	8193.5	603.8	603.8	699.3	796.2	870.6	850.9	773.7	740.0	730.2
77.5°	5434.3	3437.5	473.2	501.3	581.3	683.8	776.5	783.5	716.1	758.3	688.1
80°	1444.9	947.8	360.9	394.6	456.4	564.5	675.4	672.6	599.6	560.3	521.0
82.5°	550.4	373.5	257.0	278.0	330.0	432.5	535.0	551.9	478.8	414.2	414.2
85°	212.0	160.1	158.7	167.1	192.4	286.5	404.4	418.5	360.9	306.1	315.9
87.5°	54.8	47.7	59.0	56.2	88.5	153.1	231.7	240.1	220.5	127.8	182.5
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)