

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: P884337

Luminaire Tested: **NAV-SB5A-835-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884337  
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-SB5A-835-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19030 lumens  
Efficiency: N/A  
Efficacy: 134.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

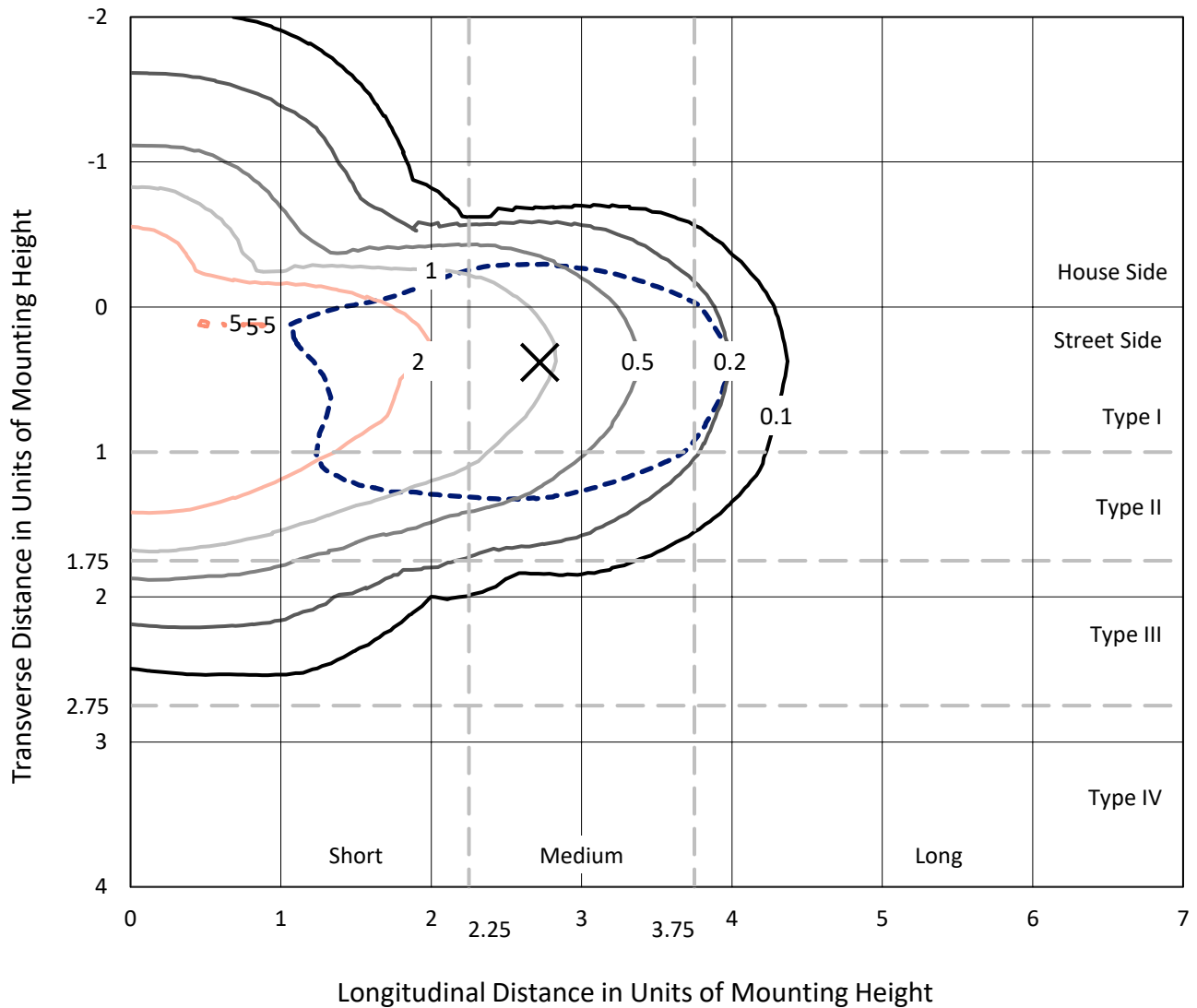
Input Watts (W): 141.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.201  
Voltage Rise (V): NR  
Power Factor: 0.992  
Total Harmonic Distortion (THDi): 10.503  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

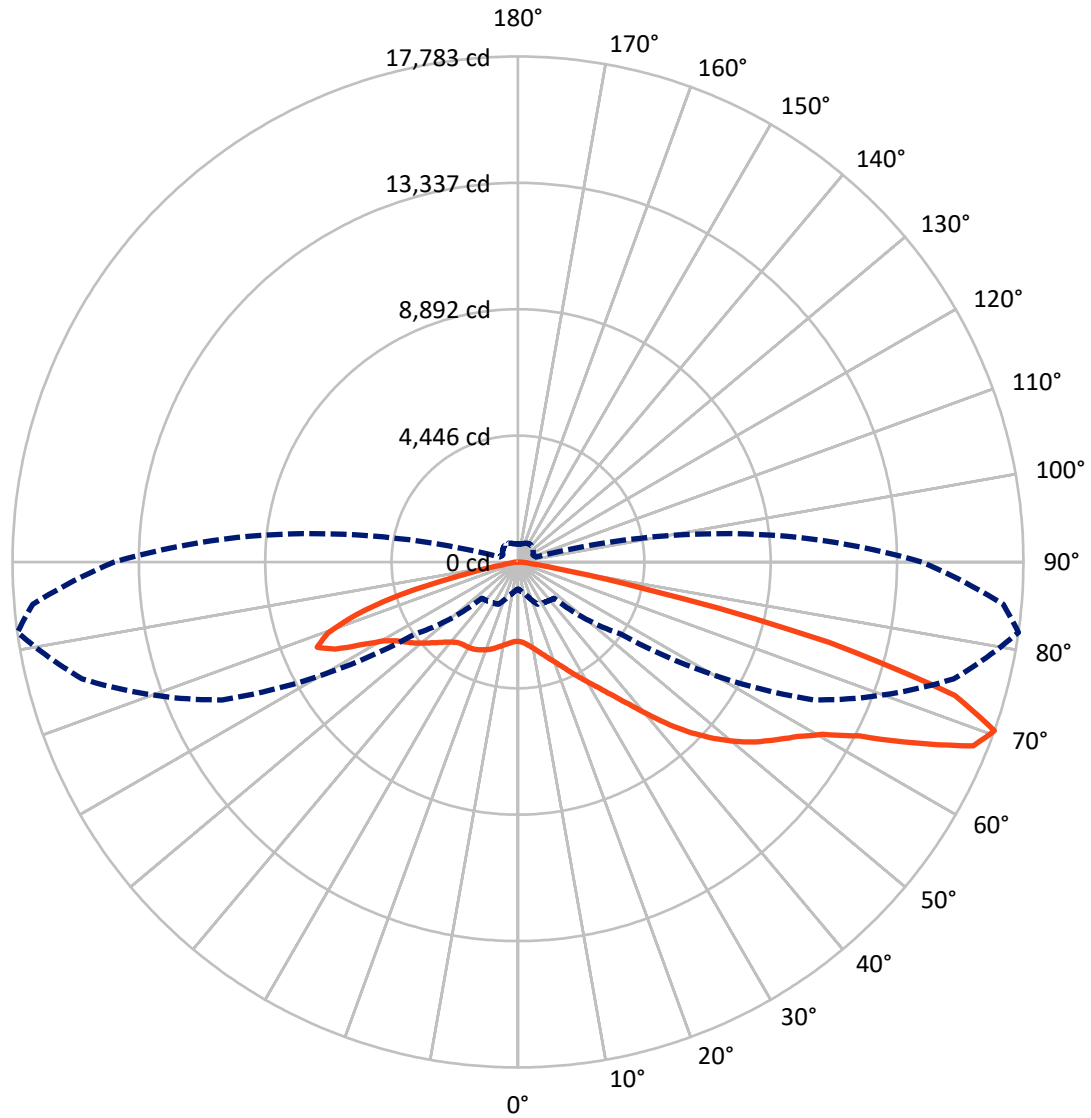
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 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	4691.4	0.0	4691.4
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	14338.6	0.0	14338.6
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	19030.0	0.0	19030.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	263.4	1.4
10°-20°	756.8	4.0
20°-30°	1266.1	6.7
30°-40°	1978.0	10.4
40°-50°	3150.2	16.6
50°-60°	4383.9	23.0
60°-70°	4585.8	24.1
70°-80°	2396.8	12.6
80°-90°	248.9	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°	19030.0	100.0
0°-180°	19030.0	100.0

**Coefficient of Utilization**



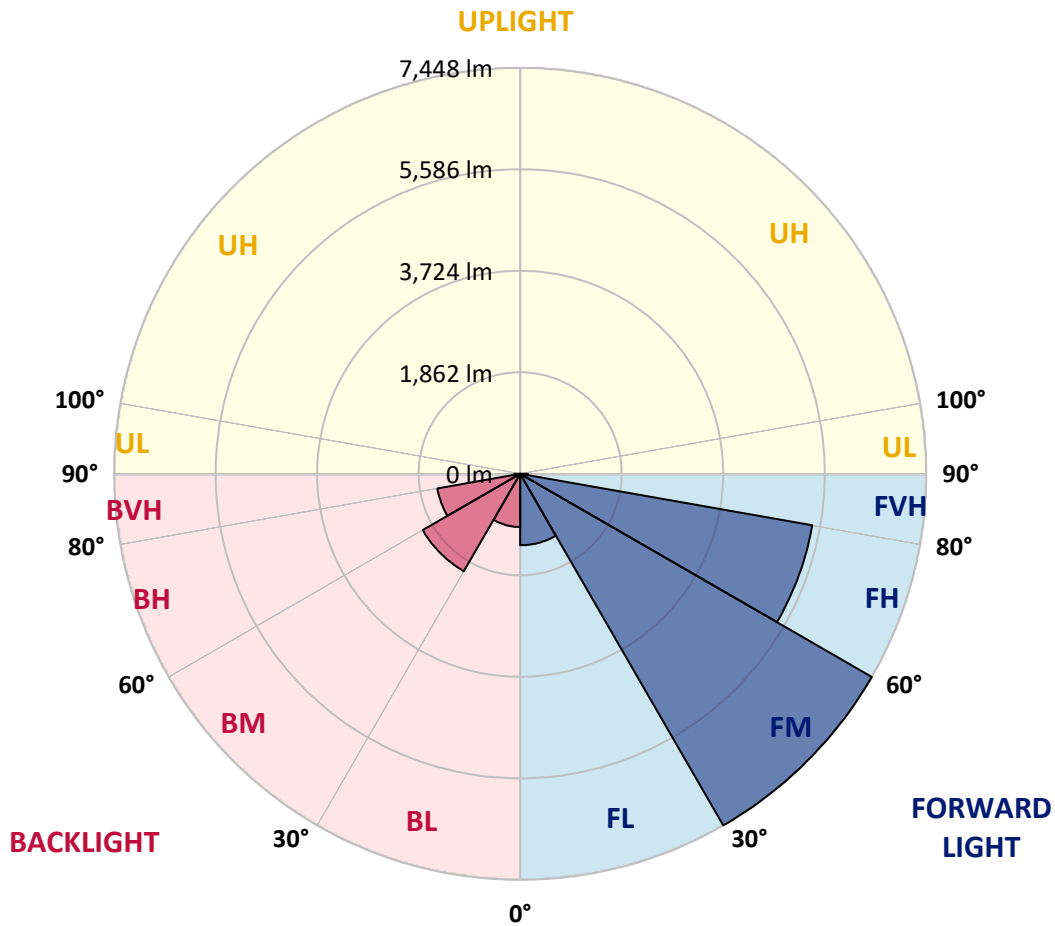
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1310.4	6.9			
FM (30°-60°)	7448.2	39.1			
FH (60°-80°)	5440.7	28.6			G3/7500
FVH (80°-90°)	139.3	0.7			G2/225
BL (0°-30°)	976.0	5.1	B2/1000		
BM (30°-60°)	2064.0	10.8	B2/2500		
BH (60°-80°)	1541.8	8.1	B3/2500		G3/2500
BVH (80°-90°)	109.6	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°	2790.0	2790.0	2790.0	2790.0	2790.0	2790.0	2790.0	2790.0	2790.0	2790.0	2790.0
2.5°	2856.7	2872.8	2867.8	2862.7	2862.7	2855.7	2854.7	2844.6	2836.5	2823.4	2820.3
5°	2893.0	2910.2	2908.2	2912.2	2925.3	2928.4	2931.4	2925.3	2909.2	2893.0	2886.0
7.5°	2860.7	2879.9	2886.0	2910.2	2950.6	2986.9	3014.2	3025.3	3010.2	2986.9	2975.8
10°	2751.7	2772.9	2794.1	2851.6	2923.3	3009.2	3081.9	3125.3	3122.3	3100.0	3080.9
12.5°	2530.5	2552.7	2598.2	2710.3	2841.5	2993.0	3128.3	3219.2	3250.5	3234.3	3201.0
15°	2353.8	2373.0	2407.3	2522.4	2693.1	2923.3	3145.5	3322.2	3402.0	3392.9	3352.5
17.5°	2348.8	2356.8	2378.0	2432.6	2563.8	2814.3	3127.3	3423.2	3575.6	3574.6	3524.1
20°	2437.6	2440.7	2452.8	2463.9	2538.6	2731.5	3080.9	3507.0	3770.5	3770.5	3716.0
22.5°	2560.8	2558.8	2570.9	2560.8	2597.2	2724.4	3051.6	3580.7	3987.6	4003.8	3935.1
25°	2745.6	2735.5	2732.5	2709.3	2716.3	2790.0	3083.9	3664.5	4245.1	4278.5	4192.6
27.5°	2992.0	2975.8	2964.7	2911.2	2893.0	2925.3	3182.8	3765.5	4531.9	4589.5	4480.4
30°	3313.1	3283.8	3267.7	3174.8	3109.1	3114.2	3332.3	3899.8	4831.8	4924.7	4786.4
32.5°	3751.4	3705.9	3662.5	3510.0	3389.8	3350.5	3525.2	4085.6	5157.0	5305.4	5127.7
35°	4242.1	4205.8	4159.3	3924.0	3739.2	3648.4	3785.7	4345.1	5537.7	5772.9	5541.7
37.5°	4714.7	4683.4	4705.6	4388.5	4150.2	4017.9	4127.0	4693.5	6007.2	6354.6	6060.7
40°	5203.4	5179.2	5182.2	4879.3	4601.6	4453.2	4541.0	5130.7	6545.4	7046.3	6684.8
42.5°	5734.6	5716.4	5655.8	5387.2	5075.2	4936.8	5017.6	5635.6	7123.0	7833.9	7369.4
45°	6329.3	6318.2	6261.7	5953.7	5596.2	5440.7	5549.8	6193.0	7703.6	8575.1	8057.1
47.5°	6843.3	6852.4	6845.3	6585.8	6215.2	5987.0	6117.3	6774.6	8243.9	9271.8	8716.5
50°	7090.7	7138.2	7207.8	7127.1	6896.8	6664.6	6689.8	7336.1	8758.9	9925.2	9348.6
52.5°	6961.5	7051.3	7241.2	7370.4	7459.3	7410.8	7343.2	7893.5	9243.6	10514.9	9946.4
55°	6479.8	6606.0	6921.1	7233.1	7686.5	8038.9	8127.8	8511.5	9716.2	11033.9	10511.9
57.5°	5602.3	5807.3	6090.0	6721.1	7484.5	8342.8	9042.6	9368.8	10217.0	11588.3	11103.6
60°	4097.7	4372.4	4723.8	5662.9	6777.7	8180.3	9821.2	10685.5	10928.9	12306.2	11874.1
62.5°	2622.4	2792.1	3115.2	3999.8	5281.2	7347.2	10059.5	12331.5	12135.6	13483.7	13029.3
65°	1795.4	1904.5	2200.3	2697.1	3414.1	5469.0	9421.3	13565.5	14052.2	15349.7	15004.4
67.5°	1304.6	1387.4	1639.9	2075.1	2224.6	3236.4	7310.8	13508.9	15915.2	17272.4	16735.2
70°	951.2	1009.8	1221.8	1639.9	1711.6	1800.4	4428.9	11483.3	15874.8	17783.3	17140.1
72.5°	704.8	745.2	887.6	1272.3	1385.4	1215.8	2192.2	8345.9	13641.2	16084.9	15568.9
75°	509.9	540.2	645.3	973.4	1108.7	926.0	1093.6	4877.3	9515.2	11314.6	11405.5
77.5°	389.8	413.0	481.7	712.9	887.6	694.7	678.6	2243.7	4511.7	4533.9	4788.4
80°	313.0	328.2	365.5	501.9	680.6	520.0	442.3	905.8	1425.8	1206.7	1266.3
82.5°	230.2	255.5	309.0	352.4	486.7	358.5	269.6	457.4	542.3	466.5	470.6
85°	131.3	148.4	186.8	252.4	311.0	219.1	154.5	203.0	252.4	207.0	184.8
87.5°	46.5	60.6	65.6	99.0	135.3	90.9	59.6	58.6	82.8	61.6	51.5
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°	2790.0	2790.0	2790.0	2790.0	2790.0	2790.0	2790.0	2790.0	2790.0	2790.0	2790.0
2.5°	2810.2	2805.2	2785.0	2757.7	2729.4	2702.2	2693.1	2673.9	2660.8	2653.7	2661.8
5°	2866.8	2850.6	2803.2	2742.6	2679.0	2610.3	2561.8	2517.4	2485.1	2454.8	2466.9
7.5°	2947.6	2919.3	2837.5	2731.5	2618.4	2504.3	2419.4	2354.8	2311.4	2283.1	2289.2
10°	3041.5	2998.1	2872.8	2714.3	2539.6	2376.0	2276.1	2220.5	2193.3	2178.1	2182.1
12.5°	3149.5	3087.9	2909.2	2674.9	2419.4	2232.6	2164.0	2147.8	2148.8	2149.8	2151.9
15°	3282.8	3197.0	2938.5	2589.1	2262.9	2122.6	2110.5	2136.7	2164.0	2177.1	2176.1
17.5°	3433.3	3312.1	2943.5	2447.7	2109.4	2051.9	2090.3	2146.8	2188.2	2206.4	2210.4
20°	3594.8	3429.2	2907.2	2247.8	1983.2	1994.3	2063.0	2135.7	2181.1	2204.4	2210.4
22.5°	3779.6	3554.4	2820.3	2037.7	1880.2	1931.7	2012.5	2083.2	2130.6	2153.9	2159.9
25°	3990.7	3694.8	2684.0	1861.0	1791.4	1861.0	1941.8	2000.4	2038.8	2060.0	2066.0
27.5°	4224.9	3841.2	2502.2	1720.7	1713.6	1788.3	1855.0	1900.4	1920.6	1936.8	1942.8
30°	4460.2	3974.5	2282.1	1614.6	1645.9	1716.6	1764.1	1784.3	1790.3	1793.4	1800.4
32.5°	4714.7	4089.6	2050.9	1526.8	1581.3	1647.0	1675.2	1684.3	1656.0	1636.9	1642.9
35°	5022.7	4212.8	1824.7	1457.1	1517.7	1574.3	1583.3	1575.3	1541.9	1502.6	1504.6
37.5°	5403.4	4366.3	1643.9	1407.6	1458.1	1495.5	1484.4	1482.4	1485.4	1438.9	1442.0
40°	5869.9	4566.2	1511.6	1369.3	1409.7	1417.7	1386.4	1403.6	1418.7	1348.1	1350.1
42.5°	6387.9	4807.6	1427.8	1343.0	1369.3	1350.1	1301.6	1320.8	1318.8	1225.9	1224.9
45°	6916.0	5070.1	1398.6	1323.8	1331.9	1293.5	1240.0	1245.1	1202.7	1118.8	1121.9
47.5°	7441.1	5351.9	1416.7	1307.7	1285.5	1242.0	1200.6	1178.4	1115.8	1053.2	1053.2
50°	7956.1	5647.7	1483.4	1275.4	1221.8	1196.6	1166.3	1126.9	1060.3	1006.8	1002.7
52.5°	8433.7	5945.6	1558.1	1221.8	1142.1	1157.2	1138.0	1092.6	1027.0	972.4	973.4
55°	8886.1	6243.5	1587.4	1148.1	1067.3	1122.9	1111.8	1028.0	949.2	904.8	900.7
57.5°	9378.9	6602.0	1555.1	1054.2	1006.8	1083.5	1041.1	948.2	902.7	869.4	866.4
60°	10061.5	7164.4	1485.4	938.1	949.2	1024.9	952.2	913.9	864.4	827.0	825.0
62.5°	11195.5	8213.6	1373.3	823.0	881.5	938.1	909.8	871.4	821.0	784.6	784.6
65°	12871.7	9671.7	1162.3	733.1	805.8	853.3	864.4	826.0	773.5	735.1	737.1
67.5°	14285.4	10586.6	879.5	658.4	728.1	784.6	815.9	778.5	723.0	685.6	686.7
70°	14207.7	9922.1	671.5	584.7	659.4	716.9	757.3	728.1	668.5	633.1	636.2
72.5°	12619.3	8300.4	543.3	509.9	589.7	646.3	694.7	672.5	611.9	577.6	577.6
75°	9270.8	5892.1	434.2	434.2	502.9	572.5	626.1	611.9	556.4	532.2	525.1
77.5°	3907.9	2472.0	340.3	360.5	418.1	491.8	558.4	563.5	515.0	545.3	494.8
80°	1039.1	681.6	259.5	283.7	328.2	405.9	485.7	483.7	431.2	402.9	374.6
82.5°	395.8	268.6	184.8	199.9	237.3	311.0	384.7	396.8	344.3	297.9	297.9
85°	152.5	115.1	114.1	120.2	138.3	206.0	290.8	300.9	259.5	220.1	227.2
87.5°	39.4	34.3	42.4	40.4	63.6	110.1	166.6	172.7	158.5	91.9	131.3
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)