

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: P883307

Luminaire Tested: **NAV-SB3C-830-U-T2**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P883307  
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-SB3C-830-U-T2  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

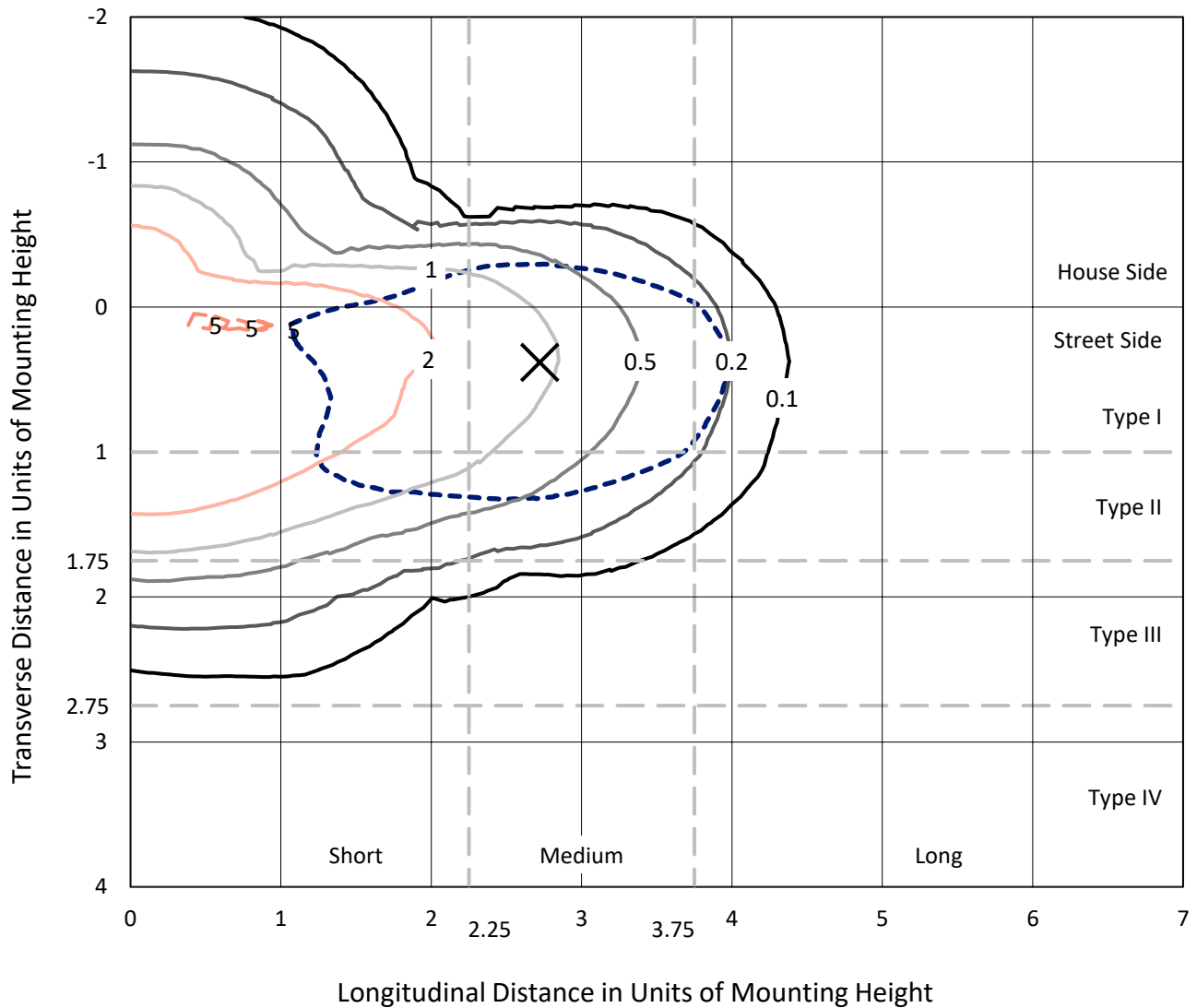
Lumens per Lamp: N/A  
Luminaire Lumens: 19475 lumens  
Efficiency: N/A  
Efficacy: 130.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 149.1  
Input Voltage (V): 120.0  
Input Current (Ain): 1.259  
Voltage Rise (V): NR  
Power Factor: 0.997  
Total Harmonic Distortion (THDi): 6.297  
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

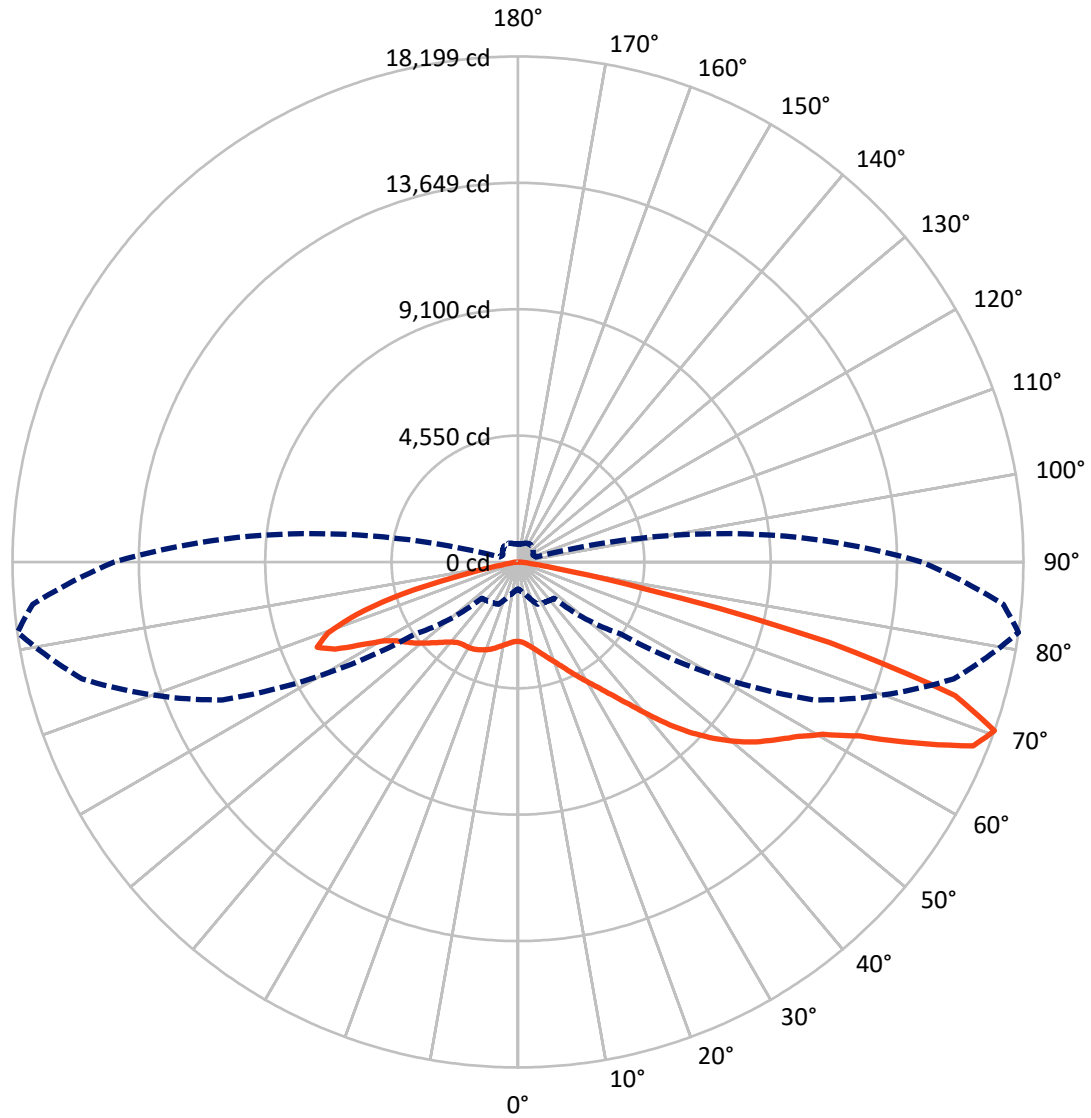
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 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	4801.1	0.0	4801.1
	% Fixture	24.7	0.0	24.7
<b>Street Side</b>	Lumens	14673.9	0.0	14673.9
	% Fixture	75.3	0.0	75.3
<b>Total</b>	Lumens	19475.0	0.0	19475.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	269.6	1.4
10°-20°	774.5	4.0
20°-30°	1295.7	6.7
30°-40°	2024.3	10.4
40°-50°	3223.9	16.6
50°-60°	4486.4	23.0
60°-70°	4693.0	24.1
70°-80°	2452.8	12.6
80°-90°	254.7	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°	19475.0	100.0
0°-180°	19475.0	100.0

**Coefficient of Utilization**

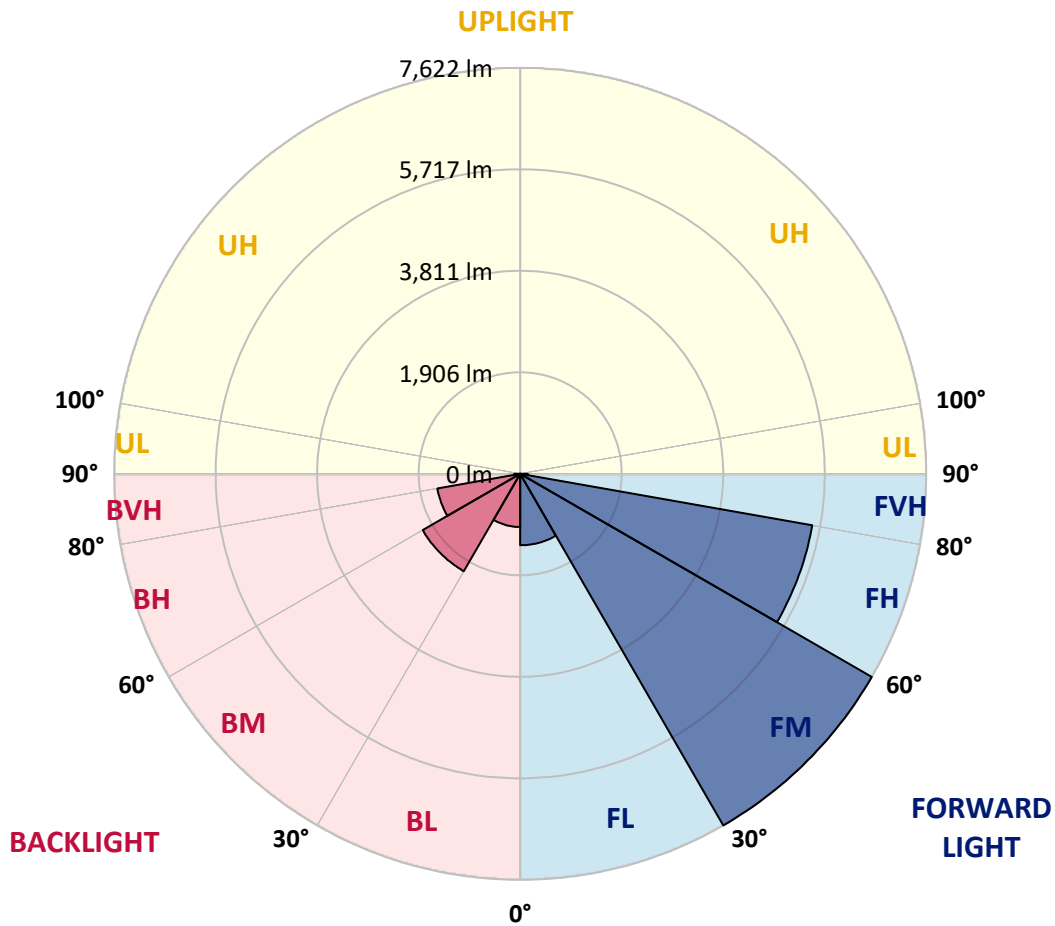


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1341.1	6.9			
FM (30°-60°)	7622.3	39.1			
FH (60°-80°)	5568.0	28.6			G3/7500
FVH (80°-90°)	142.6	0.7			G2/225
BL (0°-30°)	998.8	5.1	B2/1000		
BM (30°-60°)	2112.3	10.8	B2/2500		
BH (60°-80°)	1577.9	8.1	B3/2500		G3/2500
BVH (80°-90°)	112.1	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°	2855.3	2855.3	2855.3	2855.3	2855.3	2855.3	2855.3	2855.3	2855.3	2855.3	2855.3
2.5°	2923.5	2940.0	2934.9	2929.7	2929.7	2922.4	2921.4	2911.1	2902.8	2889.4	2886.3
5°	2960.7	2978.3	2976.2	2980.3	2993.8	2996.9	3000.0	2993.8	2977.2	2960.7	2953.5
7.5°	2927.6	2947.3	2953.5	2978.3	3019.6	3056.8	3084.7	3096.1	3080.6	3056.8	3045.4
10°	2816.0	2837.7	2859.4	2918.3	2991.7	3079.5	3153.9	3198.4	3195.3	3172.5	3152.9
12.5°	2589.7	2612.4	2658.9	2773.6	2908.0	3063.0	3201.5	3294.5	3326.5	3310.0	3275.9
15°	2408.9	2428.5	2463.6	2581.4	2756.1	2991.7	3219.0	3399.9	3481.5	3472.2	3430.9
17.5°	2403.7	2412.0	2433.7	2489.5	2623.8	2880.1	3200.4	3503.2	3659.3	3658.2	3606.6
20°	2494.6	2497.7	2510.1	2521.5	2598.0	2795.3	3152.9	3589.0	3858.7	3858.7	3802.9
22.5°	2620.7	2618.6	2631.0	2620.7	2657.9	2788.1	3122.9	3664.4	4080.9	4097.4	4027.2
25°	2809.8	2799.5	2796.4	2772.6	2779.8	2855.3	3156.0	3750.2	4344.4	4378.5	4290.7
27.5°	3062.0	3045.4	3034.1	2979.3	2960.7	2993.8	3257.3	3853.5	4637.9	4696.8	4585.2
30°	3390.6	3360.6	3344.1	3249.0	3181.8	3187.0	3410.2	3991.0	4944.8	5039.9	4898.3
32.5°	3839.1	3792.6	3748.1	3592.1	3469.1	3428.8	3607.6	4181.1	5277.6	5429.5	5247.6
35°	4341.3	4304.1	4256.6	4015.8	3826.7	3733.7	3874.2	4446.7	5667.2	5907.9	5671.3
37.5°	4824.9	4792.9	4815.6	4491.1	4247.3	4111.9	4223.5	4803.2	6147.7	6503.2	6202.5
40°	5325.1	5300.3	5303.4	4993.4	4709.2	4557.3	4647.2	5250.7	6698.5	7211.1	6841.1
42.5°	5868.7	5850.1	5788.1	5513.2	5193.9	5052.3	5135.0	5767.4	7289.6	8017.1	7541.7
45°	6477.3	6466.0	6408.1	6092.9	5727.1	5567.9	5679.6	6337.8	7883.8	8775.6	8245.5
47.5°	7003.3	7012.6	7005.4	6739.8	6360.6	6127.0	6260.3	6933.1	8436.7	9488.7	8920.3
50°	7256.5	7305.1	7376.4	7293.7	7058.1	6820.4	6846.3	7507.6	8963.7	10157.3	9567.2
52.5°	7124.2	7216.2	7410.5	7542.8	7633.7	7584.1	7514.9	8078.1	9459.7	10760.8	10179.0
55°	6631.3	6760.5	7082.9	7402.2	7866.2	8226.9	8317.8	8710.5	9943.4	11291.9	10757.7
57.5°	5733.3	5943.1	6232.4	6878.3	7659.5	8537.9	9254.1	9587.9	10455.9	11859.3	11363.2
60°	4193.5	4474.6	4834.2	5795.3	6936.2	8371.6	10050.8	10935.4	11184.5	12594.0	12151.7
62.5°	2683.7	2857.3	3188.0	4093.3	5404.7	7519.0	10294.7	12619.9	12419.4	13799.0	13333.9
65°	1837.4	1949.0	2251.8	2760.2	3493.9	5596.9	9641.6	13882.7	14380.8	15708.7	15355.3
67.5°	1335.2	1419.9	1678.2	2123.6	2276.6	3312.0	7481.8	13824.8	16287.4	17676.3	17126.5
70°	973.5	1033.4	1250.4	1678.2	1751.6	1842.5	4532.5	11751.8	16246.0	18199.2	17540.9
72.5°	721.3	762.6	908.4	1302.1	1417.8	1244.2	2243.5	8541.0	13960.2	16461.0	15932.9
75°	521.9	552.9	660.3	996.2	1134.7	947.6	1119.2	4991.3	9737.7	11579.2	11672.2
77.5°	398.9	422.7	492.9	729.6	908.4	711.0	694.4	2296.2	4617.2	4640.0	4900.4
80°	320.4	335.9	374.1	513.6	696.5	532.2	452.6	927.0	1459.2	1234.9	1295.9
82.5°	235.6	261.4	316.2	360.7	498.1	366.9	275.9	468.1	554.9	477.4	481.6
85°	134.3	151.9	191.2	258.3	318.3	224.2	158.1	207.7	258.3	211.8	189.1
87.5°	47.5	62.0	67.2	101.3	138.5	93.0	61.0	59.9	84.7	63.0	52.7
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°	2855.3	2855.3	2855.3	2855.3	2855.3	2855.3	2855.3	2855.3	2855.3	2855.3	2855.3
2.5°	2875.9	2870.8	2850.1	2822.2	2793.3	2765.4	2756.1	2736.4	2723.0	2715.8	2724.0
5°	2933.8	2917.3	2868.7	2806.7	2741.6	2671.3	2621.7	2576.3	2543.2	2512.2	2524.6
7.5°	3016.5	2987.6	2903.8	2795.3	2679.6	2562.8	2476.0	2409.9	2365.4	2336.5	2342.7
10°	3112.6	3068.2	2940.0	2777.8	2599.0	2431.6	2329.3	2272.4	2244.5	2229.0	2233.2
12.5°	3223.2	3160.1	2977.2	2737.5	2476.0	2284.8	2214.6	2198.0	2199.1	2200.1	2202.2
15°	3359.6	3271.7	3007.2	2649.6	2315.8	2172.2	2159.8	2186.7	2214.6	2228.0	2227.0
17.5°	3513.6	3389.5	3012.4	2505.0	2158.8	2099.9	2139.1	2197.0	2239.4	2258.0	2262.1
20°	3678.9	3509.4	2975.2	2300.3	2029.6	2041.0	2111.2	2185.6	2232.1	2255.9	2262.1
22.5°	3868.0	3637.6	2886.3	2085.4	1924.2	1976.9	2059.6	2131.9	2180.5	2204.2	2210.4
25°	4084.0	3781.2	2746.8	1904.6	1833.2	1904.6	1987.2	2047.2	2086.4	2108.1	2114.3
27.5°	4323.7	3931.0	2560.8	1760.9	1753.7	1830.1	1898.4	1944.9	1965.5	1982.1	1988.3
30°	4564.5	4067.5	2335.5	1652.4	1684.4	1756.8	1805.3	1826.0	1832.2	1835.3	1842.5
32.5°	4824.9	4185.3	2098.8	1562.5	1618.3	1685.5	1714.4	1723.7	1694.8	1675.1	1681.3
35°	5140.1	4311.3	1867.4	1491.2	1553.2	1611.1	1620.4	1612.1	1578.0	1537.7	1539.8
37.5°	5529.7	4468.4	1682.4	1440.6	1492.2	1530.5	1519.1	1517.0	1520.1	1472.6	1475.7
40°	6007.1	4673.0	1547.0	1401.3	1442.6	1450.9	1418.9	1436.4	1451.9	1379.6	1381.7
42.5°	6537.3	4920.0	1461.2	1374.4	1401.3	1381.7	1332.0	1351.7	1349.6	1254.5	1253.5
45°	7077.7	5188.7	1431.3	1354.8	1363.1	1323.8	1269.0	1274.2	1230.8	1145.0	1148.1
47.5°	7615.1	5477.0	1449.9	1338.3	1315.5	1271.1	1228.7	1206.0	1141.9	1077.8	1077.8
50°	8142.1	5779.8	1518.1	1305.2	1250.4	1224.6	1193.6	1153.3	1085.1	1030.3	1026.2
52.5°	8630.9	6084.6	1594.5	1250.4	1168.8	1184.3	1164.6	1118.1	1051.0	995.2	996.2
55°	9093.9	6389.5	1624.5	1175.0	1092.3	1149.1	1137.8	1052.0	971.4	925.9	921.8
57.5°	9598.2	6756.4	1591.4	1078.9	1030.3	1108.8	1065.4	970.4	923.9	889.8	886.7
60°	10296.8	7332.0	1520.1	960.0	971.4	1048.9	974.5	935.2	884.6	846.4	844.3
62.5°	11457.3	8405.7	1405.4	842.2	902.2	960.0	931.1	891.8	840.2	803.0	803.0
65°	13172.7	9897.9	1189.4	750.2	824.7	873.2	884.6	845.3	791.6	752.3	754.4
67.5°	14619.5	10834.1	900.1	673.8	745.1	803.0	835.0	796.7	739.9	701.7	702.7
70°	14539.9	10154.2	687.2	598.3	674.8	733.7	775.0	745.1	684.1	647.9	651.0
72.5°	12914.4	8494.5	556.0	521.9	603.5	661.4	711.0	688.2	626.2	591.1	591.1
75°	9487.6	6029.9	444.4	444.4	514.6	585.9	640.7	626.2	569.4	544.6	537.4
77.5°	3999.3	2529.8	348.3	368.9	427.8	503.3	571.5	576.6	527.0	558.0	506.4
80°	1063.4	697.5	265.6	290.4	335.9	415.4	497.1	495.0	441.3	412.3	383.4
82.5°	405.1	274.9	189.1	204.6	242.8	318.3	393.7	406.1	352.4	304.9	304.9
85°	156.0	117.8	116.8	123.0	141.6	210.8	297.6	308.0	265.6	225.3	232.5
87.5°	40.3	35.1	43.4	41.3	65.1	112.6	170.5	176.7	162.2	94.0	134.3
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)