

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: P884339

Luminaire Tested: **NAV-SB5A-835-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884339
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-835-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19219 lumens
Efficiency: N/A
Efficacy: 135.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

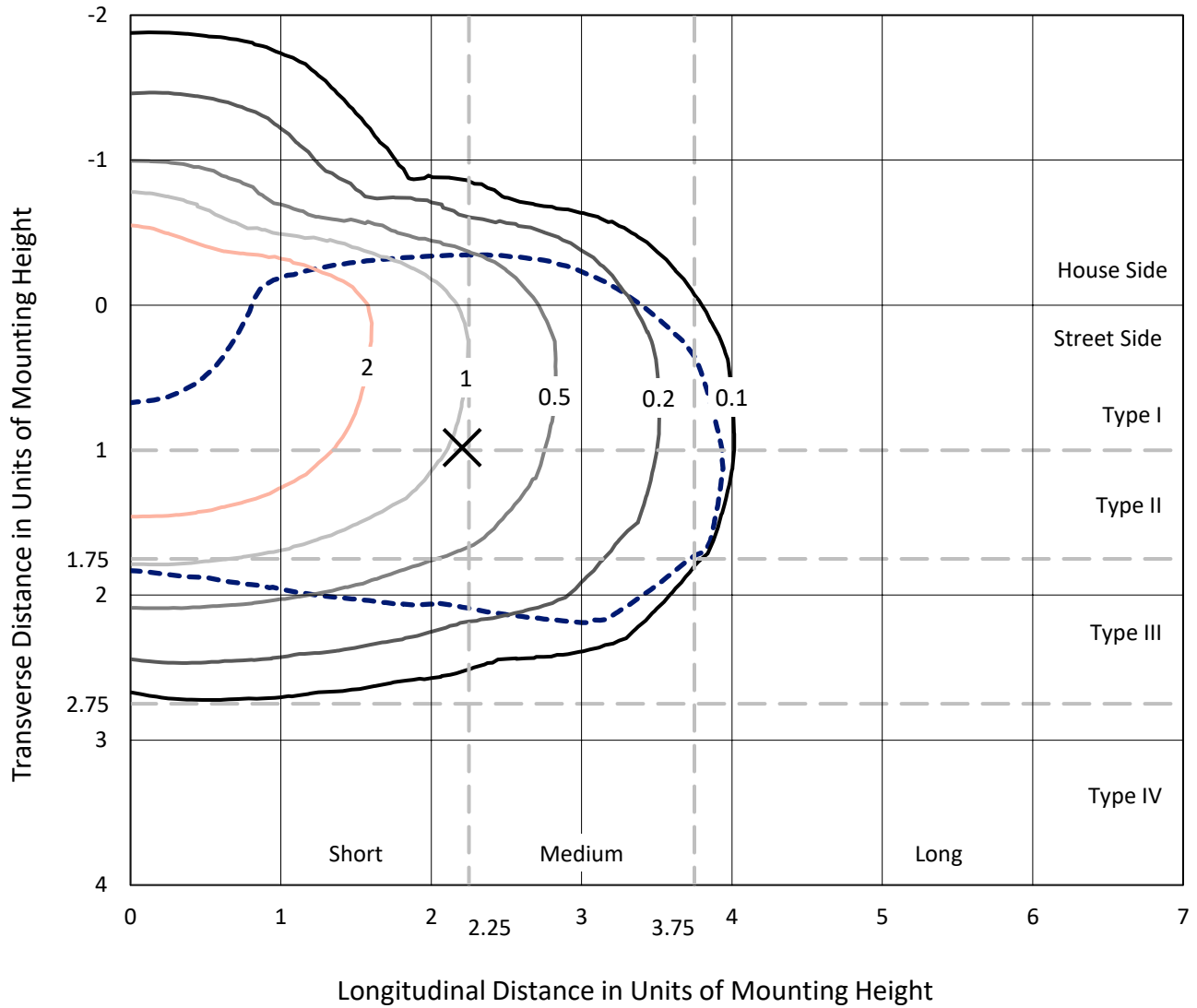
Input Watts (W): 141.7
Input Voltage (V): 120.0
Input Current (Ain): 1.201
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 10.503
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

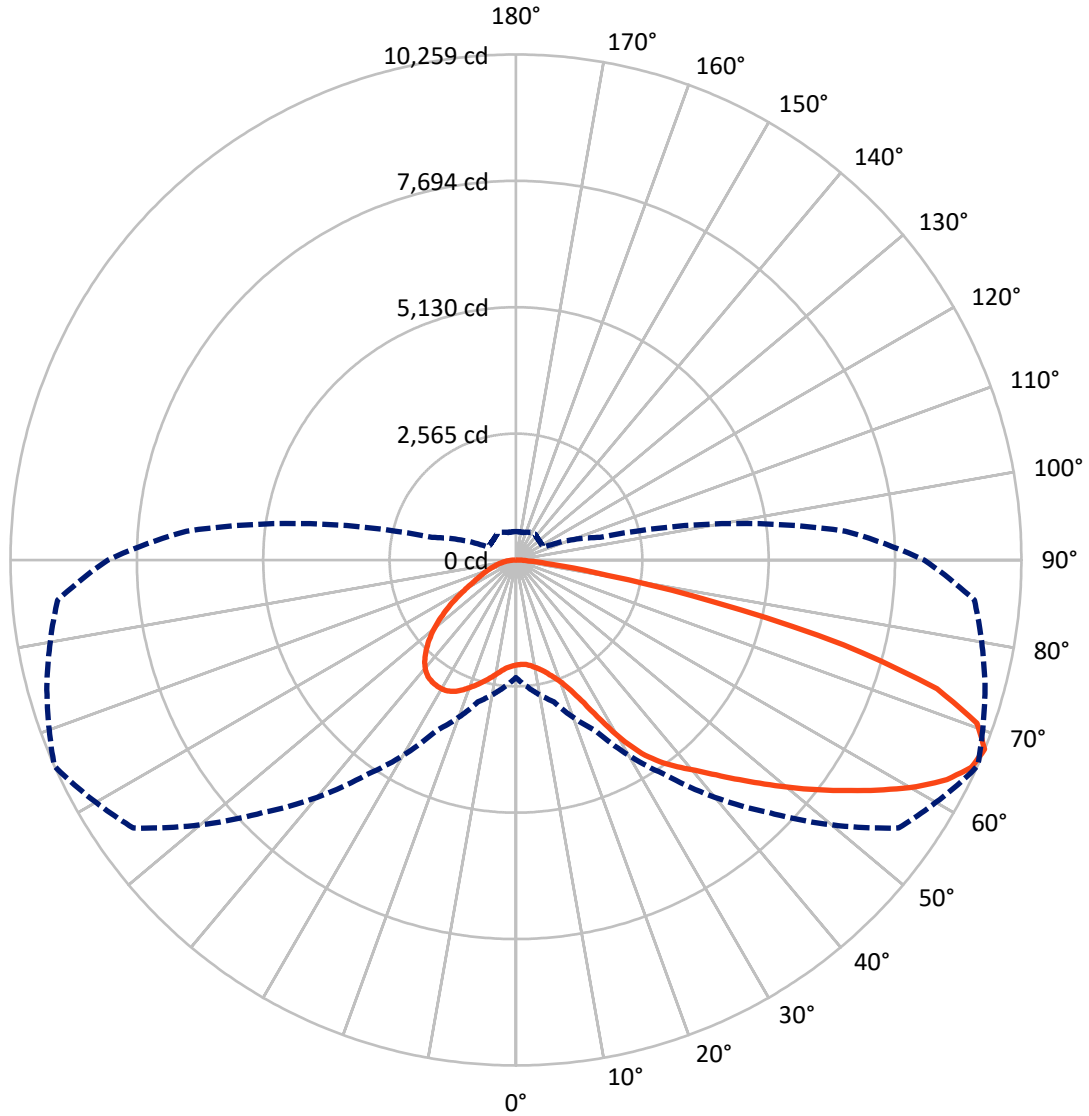
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4778.7	0.0	4778.7
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	14440.2	0.0	14440.2
	% Fixture	75.1	0.0	75.1
Total	Lumens	19219.0	0.0	19219.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.3	1.1
10°-20°	698.2	3.6
20°-30°	1345.8	7.0
30°-40°	2359.8	12.3
40°-50°	3508.2	18.3
50°-60°	4447.0	23.1
60°-70°	4351.2	22.6
70°-80°	2075.6	10.8
80°-90°	221.8	1.2
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°	19219.0	100.0
0°-180°	19219.0	100.0

Coefficient of Utilization



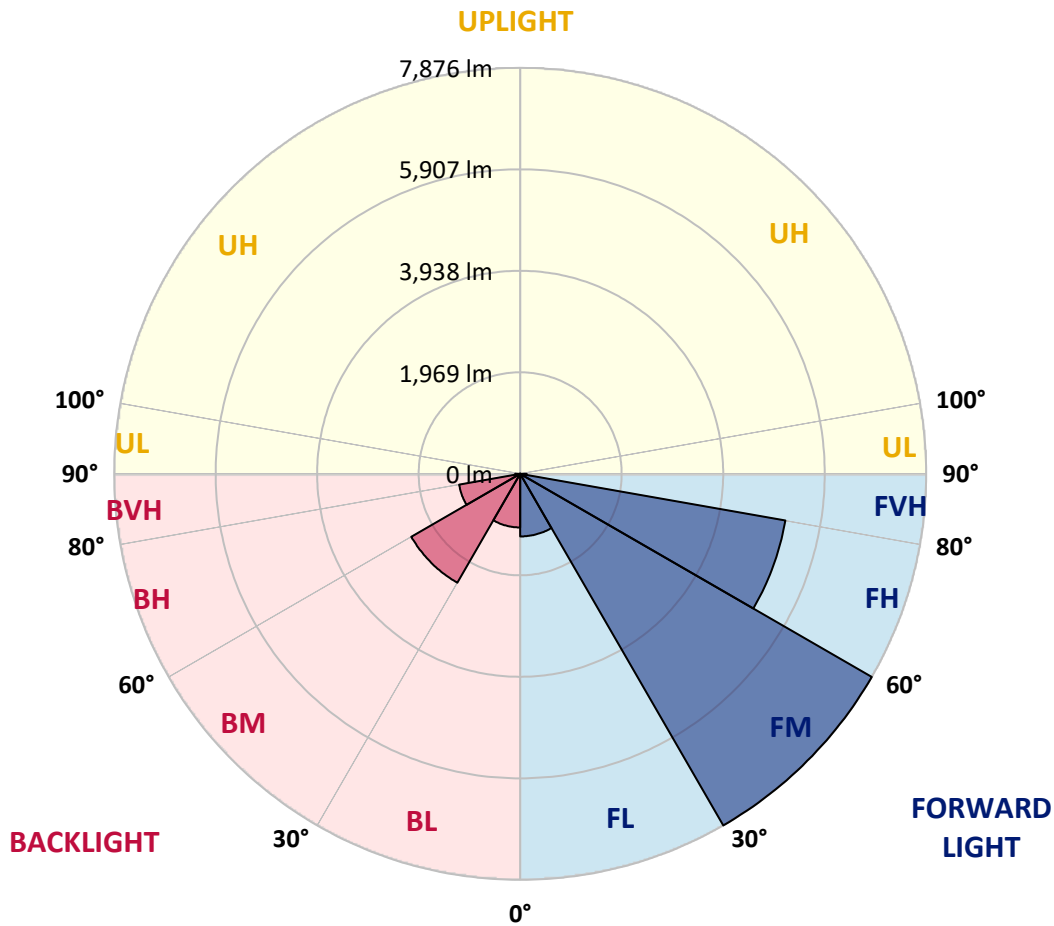
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1214.5	6.3			
FM (30°-60°)	7875.8	41.0			
FH (60°-80°)	5224.2	27.2			G3/7500
FVH (80°-90°)	125.8	0.7			G2/225
BL (0°-30°)	1041.0	5.4	B3/2500		
BM (30°-60°)	2439.1	12.7	B2/2500		
BH (60°-80°)	1202.6	6.3	B3/2500		G3/2500
BVH (80°-90°)	96.1	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2131.6	2131.6	2131.6	2131.6	2131.6	2131.6	2131.6	2131.6	2131.6	2131.6	2131.6
2.5°	2109.4	2121.5	2118.5	2113.5	2112.5	2114.5	2117.5	2120.5	2119.5	2124.6	2132.7
5°	2103.4	2115.5	2114.5	2114.5	2118.5	2126.6	2131.6	2136.7	2131.6	2137.7	2148.8
7.5°	2107.4	2116.5	2120.5	2124.6	2134.7	2149.8	2161.9	2173.0	2167.0	2174.1	2188.2
10°	2158.9	2166.0	2170.0	2170.0	2177.1	2194.2	2206.4	2226.6	2221.5	2232.6	2250.8
12.5°	2252.8	2259.9	2259.9	2255.8	2260.9	2272.0	2276.0	2298.3	2289.2	2307.3	2325.5
15°	2367.9	2382.1	2371.0	2363.9	2365.9	2377.0	2376.0	2393.2	2384.1	2399.2	2415.4
17.5°	2495.2	2513.3	2495.2	2494.2	2490.1	2502.2	2503.2	2518.4	2502.2	2513.3	2524.4
20°	2645.6	2670.9	2655.7	2660.8	2651.7	2656.7	2661.8	2684.0	2658.7	2666.8	2663.8
22.5°	2857.7	2888.0	2871.8	2891.0	2884.9	2880.9	2879.9	2919.3	2879.9	2882.9	2853.6
25°	3166.7	3203.0	3174.7	3201.0	3201.0	3214.1	3229.3	3279.8	3214.1	3194.9	3119.2
27.5°	3623.1	3659.4	3603.9	3620.1	3615.0	3647.3	3631.2	3756.4	3685.7	3654.4	3501.9
30°	4172.4	4237.0	4132.0	4128.0	4122.9	4174.4	4197.6	4280.4	4208.8	4177.5	3993.7
32.5°	4766.2	4833.8	4708.6	4672.2	4653.1	4684.4	4665.2	4731.8	4682.3	4633.9	4406.7
35°	5394.2	5460.9	5341.7	5271.0	5194.3	5128.7	5060.0	5077.2	5030.7	4957.0	4721.7
37.5°	5988.0	6110.2	5983.9	5908.2	5766.8	5638.6	5446.7	5367.0	5323.5	5255.9	5018.6
40°	6592.8	6662.5	6566.6	6502.0	6348.5	6147.5	5840.6	5671.9	5613.4	5547.7	5346.8
42.5°	7038.2	7104.8	7053.3	7008.9	6888.7	6655.4	6258.6	6047.6	5962.7	5889.0	5718.4
45°	7391.6	7441.1	7408.7	7424.9	7373.4	7147.2	6691.8	6450.5	6362.6	6272.7	6138.4
47.5°	7534.0	7586.5	7638.0	7733.9	7821.7	7655.1	7157.3	6886.7	6793.8	6701.9	6569.6
50°	7517.8	7571.3	7720.8	7924.7	8197.4	8141.8	7648.1	7351.2	7265.4	7160.3	7038.2
52.5°	7388.5	7449.1	7641.0	7980.3	8414.5	8506.4	8147.9	7830.8	7750.0	7624.8	7502.6
55°	7049.3	7085.6	7373.4	7854.1	8466.0	8760.8	8637.6	8341.8	8261.0	8086.3	7953.0
57.5°	6420.2	6472.7	6891.7	7513.8	8336.7	8933.5	9067.8	8879.0	8801.2	8549.8	8410.4
60°	5599.2	5683.0	6162.7	6942.2	8007.5	8932.5	9458.6	9407.1	9342.5	9006.2	8860.8
62.5°	4670.2	4767.2	5228.6	6134.4	7432.0	8679.0	9703.0	9849.4	9816.1	9427.3	9241.5
65°	3586.7	3653.4	4112.8	5089.3	6536.3	8134.8	9731.2	10151.3	10157.4	9747.4	9440.4
67.5°	2388.1	2580.0	2978.8	3819.0	5336.7	7245.2	9482.8	10200.8	10259.3	9857.5	9340.4
70°	1165.3	1417.7	1808.5	2482.0	3819.0	5880.9	8833.5	9794.8	9925.1	9536.3	8744.7
72.5°	483.7	565.5	778.5	1224.9	2192.2	3968.4	7528.9	8694.2	8935.5	8449.8	7352.2
75°	326.2	353.4	445.3	628.1	998.7	1956.9	5429.6	6482.8	6871.5	6381.8	5216.5
77.5°	251.4	268.6	324.1	439.3	593.7	740.2	2906.1	3906.8	4107.8	3802.8	2714.3
80°	197.9	211.0	242.3	320.1	421.1	395.8	990.6	1770.1	1886.3	1582.3	872.4
82.5°	171.7	176.7	173.7	217.1	279.7	231.2	325.1	653.3	721.0	523.1	284.8
85°	124.2	138.3	144.4	134.3	148.4	117.1	133.3	231.2	254.5	227.2	160.6
87.5°	50.5	74.7	91.9	86.8	54.5	33.3	41.4	67.7	77.8	84.8	52.5
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°	2131.6	2131.6	2131.6	2131.6	2131.6	2131.6	2131.6	2131.6	2131.6	2131.6	2131.6
2.5°	2133.7	2140.7	2145.8	2151.8	2155.9	2161.9	2174.1	2181.1	2182.1	2187.2	2186.2
5°	2152.8	2162.9	2174.1	2190.2	2208.4	2223.5	2246.8	2262.9	2269.0	2274.0	2273.0
7.5°	2194.2	2208.4	2228.6	2256.9	2283.1	2303.3	2331.6	2350.8	2369.9	2377.0	2378.0
10°	2255.8	2276.0	2305.3	2343.7	2372.0	2398.2	2427.5	2443.7	2462.8	2470.9	2475.0
12.5°	2332.6	2353.8	2392.2	2445.7	2471.9	2490.1	2500.2	2496.2	2500.2	2507.3	2509.3
15°	2420.4	2443.7	2487.1	2544.6	2562.8	2546.7	2524.4	2504.2	2501.2	2503.2	2510.3
17.5°	2524.4	2541.6	2592.1	2640.6	2627.4	2560.8	2512.3	2480.0	2463.9	2458.8	2465.9
20°	2669.9	2669.9	2711.3	2741.5	2653.7	2540.6	2464.9	2412.4	2379.0	2364.9	2361.9
22.5°	2846.6	2830.4	2856.7	2835.5	2648.6	2484.1	2379.0	2288.2	2237.7	2217.5	2214.4
25°	3070.7	3051.5	3044.5	2913.2	2612.3	2394.2	2223.5	2113.5	2069.0	2057.9	2059.9
27.5°	3409.0	3360.5	3268.7	2955.6	2545.7	2252.8	2041.8	1939.8	1914.5	1915.5	1918.6
30°	3859.4	3762.4	3537.3	2962.7	2436.6	2052.9	1856.0	1783.3	1771.2	1776.2	1793.4
32.5°	4276.4	4184.5	3811.9	2930.4	2269.0	1857.0	1689.4	1640.9	1622.7	1628.8	1636.8
35°	4603.6	4578.3	4066.4	2884.9	2063.0	1673.2	1539.9	1498.5	1463.2	1455.1	1461.1
37.5°	4912.6	4902.5	4257.2	2821.3	1859.0	1542.9	1419.7	1365.2	1313.7	1285.4	1286.5
40°	5251.9	5241.8	4382.4	2723.4	1678.3	1429.8	1311.7	1240.0	1176.4	1124.9	1129.9
42.5°	5633.6	5574.0	4442.0	2583.0	1524.8	1333.9	1223.9	1126.9	1043.1	995.6	998.7
45°	6050.6	5916.3	4441.0	2404.3	1395.5	1246.1	1129.9	992.6	914.9	870.4	868.4
47.5°	6492.9	6243.5	4386.5	2206.4	1270.3	1149.1	984.5	879.5	828.0	800.8	794.7
50°	6949.3	6549.4	4293.6	1979.2	1142.1	1039.1	893.7	822.0	782.6	757.3	748.2
52.5°	7378.4	6827.1	4181.5	1721.7	1011.8	932.0	853.3	797.7	756.3	728.0	715.9
55°	7777.3	7066.4	4023.0	1458.1	905.8	860.3	834.1	787.6	740.2	706.8	693.7
57.5°	8131.7	7221.9	3749.3	1210.7	830.0	810.9	813.9	770.5	715.9	687.7	669.5
60°	8426.6	7336.0	3344.4	981.5	768.4	762.4	782.6	738.1	674.5	642.2	628.1
62.5°	8603.3	7334.0	2847.6	803.8	715.9	718.0	741.2	697.8	633.1	602.8	593.7
65°	8588.2	7154.3	2302.3	687.7	665.4	667.5	697.8	653.3	598.8	580.6	579.6
67.5°	8284.2	6716.0	1766.1	611.9	609.9	619.0	654.3	623.0	577.6	575.6	578.6
70°	7461.2	5806.2	1272.3	551.3	552.3	565.5	611.9	603.8	566.5	570.5	569.5
72.5°	5982.9	4426.9	854.3	487.7	488.7	509.9	571.5	588.7	555.4	608.9	617.0
75°	3984.6	2760.7	549.3	420.1	421.1	448.3	536.2	559.4	525.1	606.9	611.9
77.5°	1914.5	1241.0	397.9	353.4	353.4	378.7	463.5	500.8	447.3	471.6	432.2
80°	661.4	466.5	313.0	284.8	278.7	295.9	390.8	434.2	385.7	355.4	333.2
82.5°	260.5	242.3	251.4	221.1	200.9	212.1	303.9	358.5	283.7	256.5	255.5
85°	149.4	157.5	177.7	146.4	116.1	130.3	223.2	257.5	214.1	188.8	192.9
87.5°	40.4	55.5	81.8	75.7	52.5	55.5	106.0	142.4	123.2	94.9	97.9
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)