

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: P967893

Luminaire Tested: **NAV-SB5A-830-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967893
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-830-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS
Light Source: -
Ballast/Driver: -

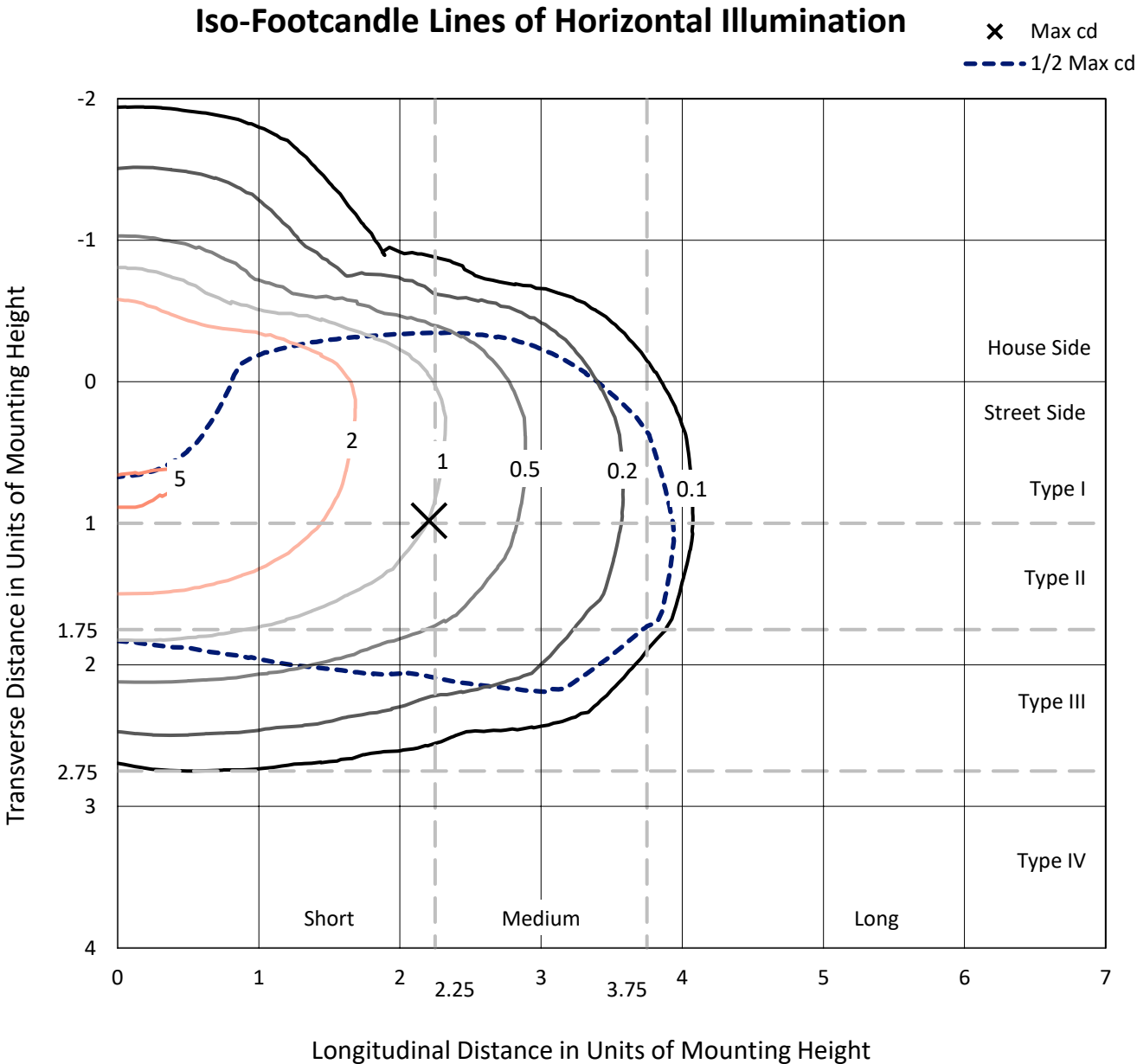
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20884.4 lumens
Efficiency: N/A
Efficacy: 147.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

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



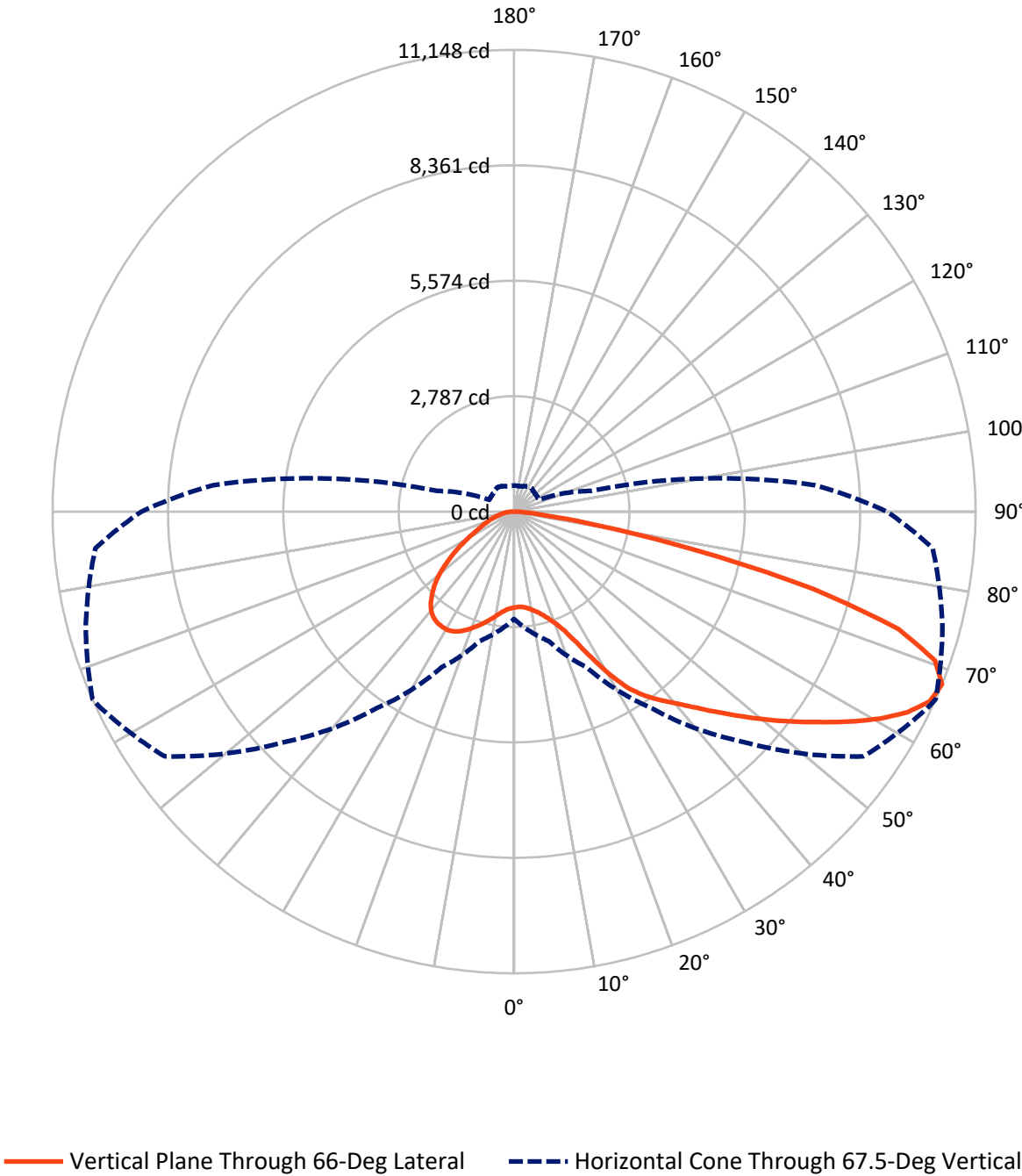
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Based on 25 foot mounting height. Maximum calculated value = 5.3 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5192.8	0.0	5192.8
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	15691.5	0.0	15691.5
	% Fixture	75.1	0.0	75.1
Total	Lumens	20884.4	0.0	20884.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.7	1.1
10°-20°	758.8	3.6
20°-30°	1462.5	7.0
30°-40°	2564.2	12.3
40°-50°	3812.2	18.3
50°-60°	4832.3	23.1
60°-70°	4728.3	22.6
70°-80°	2255.4	10.8
80°-90°	241.0	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°	20884.4	100.0
0°-180°	20884.4	100.0

Coefficient of Utilization



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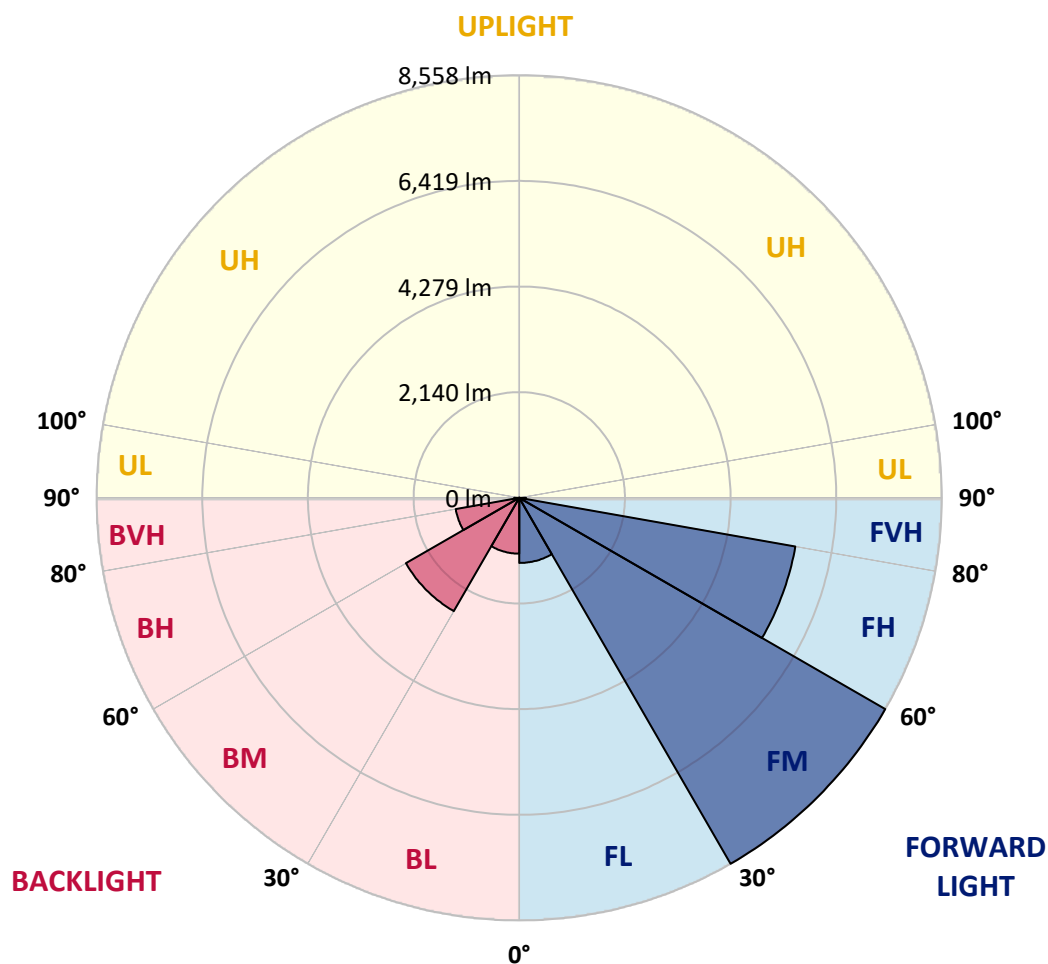
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1319.7	6.3			
FM	(30°-60°)	8558.2	41.0			
FH	(60°-80°)	5676.9	27.2			G3/7500
FVH	(80°-90°)	136.7	0.7			G2/225
BL	(0°-30°)	1131.2	5.4	B3/2500		
BM	(30°-60°)	2650.5	12.7	B3/5000		
BH	(60°-80°)	1306.8	6.3	B3/2500		G3/2500
BVH	(80°-90°)	104.4	0.5			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 III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2316.4	2316.4	2316.4	2316.4	2316.4	2316.4	2316.4	2316.4	2316.4	2316.4	2316.4
2.5°	2292.2	2305.4	2302.0	2296.6	2295.5	2297.7	2301.0	2304.3	2303.2	2308.7	2317.4
5°	2285.6	2298.8	2297.7	2297.7	2302.0	2310.9	2316.4	2321.8	2316.4	2323.0	2335.1
7.5°	2290.1	2299.9	2304.3	2308.7	2319.7	2336.1	2349.3	2361.3	2354.7	2362.4	2377.8
10°	2346.0	2353.7	2358.0	2358.0	2365.7	2384.4	2397.6	2419.5	2414.0	2426.1	2445.9
12.5°	2448.0	2455.7	2455.7	2451.3	2456.8	2468.9	2473.2	2497.4	2487.6	2507.3	2527.0
15°	2573.2	2588.4	2576.4	2568.8	2570.9	2583.0	2581.9	2600.5	2590.7	2607.1	2624.7
17.5°	2711.3	2731.1	2711.3	2710.3	2705.9	2719.0	2720.1	2736.6	2719.0	2731.1	2743.2
20°	2874.8	2902.3	2885.9	2891.3	2881.5	2886.9	2892.4	2916.5	2889.2	2897.9	2894.6
22.5°	3105.3	3138.2	3120.6	3141.5	3135.0	3130.6	3129.4	3172.3	3129.4	3132.7	3100.9
25°	3441.0	3480.6	3449.8	3478.3	3478.3	3492.6	3509.1	3563.9	3492.6	3471.8	3389.5
27.5°	3937.0	3976.5	3916.2	3933.7	3928.2	3963.4	3945.8	4081.9	4005.1	3971.1	3805.3
30°	4534.0	4604.2	4490.0	4485.7	4480.2	4536.1	4561.4	4651.3	4573.4	4539.4	4339.7
32.5°	5179.1	5252.7	5116.6	5077.1	5056.2	5090.3	5069.4	5141.8	5088.1	5035.4	4788.5
35°	5861.7	5934.0	5804.6	5727.8	5644.4	5573.0	5498.4	5517.1	5466.6	5386.6	5130.8
37.5°	6506.9	6639.6	6502.5	6420.2	6266.5	6127.2	5918.8	5832.0	5784.9	5711.3	5453.5
40°	7164.1	7239.9	7135.6	7065.3	6898.6	6680.2	6346.7	6163.4	6099.8	6028.4	5810.1
42.5°	7648.0	7720.4	7664.4	7616.2	7485.7	7232.2	6801.0	6571.6	6479.4	6399.3	6213.9
45°	8032.1	8085.8	8050.8	8068.3	8012.3	7766.5	7271.7	7009.4	6913.9	6816.2	6670.4
47.5°	8186.8	8243.9	8299.8	8404.1	8499.5	8318.5	7777.5	7483.4	7382.5	7282.6	7138.9
50°	8169.2	8227.4	8389.8	8611.4	8907.7	8847.4	8310.8	7988.1	7895.0	7780.8	7648.0
52.5°	8028.8	8094.6	8303.1	8671.8	9143.6	9243.4	8853.9	8509.3	8421.6	8285.6	8152.7
55°	7660.1	7699.6	8012.3	8534.7	9199.6	9520.0	9386.1	9064.6	8976.8	8787.0	8642.2
57.5°	6976.5	7033.6	7489.0	8164.8	9059.2	9707.6	9853.5	9648.3	9563.9	9290.6	9139.2
60°	6084.4	6175.5	6696.7	7543.8	8701.4	9706.5	10278.2	10222.2	10152.0	9786.6	9628.6
62.5°	5074.9	5180.2	5681.7	6666.0	8076.0	9431.1	10543.8	10702.8	10666.7	10244.2	10042.3
65°	3897.6	3969.9	4469.2	5530.3	7102.6	8839.7	10574.5	11030.9	11037.5	10592.0	10258.4
67.5°	2595.1	2803.6	3237.0	4149.9	5799.1	7872.9	10304.5	11084.7	11148.3	10711.7	10149.9
70°	1266.3	1540.6	1965.2	2697.1	4149.9	6390.6	9599.0	10643.6	10785.2	10362.6	9502.5
72.5°	525.6	614.5	846.0	1331.0	2382.2	4312.3	8181.3	9447.5	9709.8	9182.1	7989.3
75°	354.4	384.1	483.9	682.5	1085.2	2126.6	5900.1	7044.5	7467.0	6934.8	5668.6
77.5°	273.3	291.9	352.2	477.3	645.2	804.3	3157.9	4245.3	4463.8	4132.4	2949.4
80°	215.0	229.3	263.3	347.9	457.6	430.1	1076.5	1923.5	2049.7	1719.4	948.0
82.5°	186.5	192.0	188.7	236.0	303.9	251.2	353.3	709.9	783.4	568.4	309.4
85°	135.0	150.4	156.9	146.0	161.3	127.3	144.8	251.2	276.5	246.9	174.5
87.5°	54.8	81.2	99.8	94.4	59.2	36.2	45.0	73.5	84.5	92.1	57.1
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°	2316.4	2316.4	2316.4	2316.4	2316.4	2316.4	2316.4	2316.4	2316.4	2316.4	2316.4
2.5°	2318.5	2326.2	2331.7	2338.3	2342.6	2349.3	2362.4	2370.1	2371.2	2376.7	2375.6
5°	2339.4	2350.3	2362.4	2379.9	2399.7	2416.2	2441.4	2459.0	2465.5	2471.1	2469.9
7.5°	2384.4	2399.7	2421.7	2452.4	2480.9	2502.8	2533.6	2554.5	2575.3	2583.0	2584.1
10°	2451.3	2473.2	2505.1	2546.8	2577.5	2606.1	2637.8	2655.4	2676.3	2685.0	2689.4
12.5°	2534.7	2557.8	2599.4	2657.6	2686.1	2705.9	2716.9	2712.5	2716.9	2724.6	2726.7
15°	2630.1	2655.4	2702.6	2765.1	2784.9	2767.3	2743.2	2721.3	2718.0	2720.1	2727.8
17.5°	2743.2	2761.9	2816.7	2869.4	2855.1	2782.7	2730.0	2694.9	2677.4	2671.9	2679.6
20°	2901.2	2901.2	2946.2	2979.1	2883.6	2760.7	2678.4	2621.4	2585.2	2569.8	2566.5
22.5°	3093.2	3075.7	3104.2	3081.1	2878.2	2699.3	2585.2	2486.4	2431.6	2409.7	2406.3
25°	3336.8	3316.0	3308.3	3165.6	2838.6	2601.7	2416.2	2296.6	2248.3	2236.2	2238.5
27.5°	3704.5	3651.8	3551.9	3211.7	2766.3	2448.0	2218.7	2107.9	2080.4	2081.6	2084.8
30°	4193.8	4088.4	3843.7	3219.4	2647.8	2230.8	2016.8	1937.8	1924.6	1930.1	1948.7
32.5°	4646.9	4547.1	4142.2	3184.3	2465.5	2017.9	1835.8	1783.1	1763.3	1769.9	1778.7
35°	5002.5	4975.0	4418.8	3135.0	2241.8	1818.1	1673.3	1628.3	1590.0	1581.2	1587.7
37.5°	5338.3	5327.2	4626.1	3065.8	2020.1	1676.6	1542.7	1483.5	1427.5	1396.9	1397.9
40°	5706.9	5695.9	4762.2	2959.4	1823.7	1553.7	1425.4	1347.5	1278.3	1222.4	1227.8
42.5°	6121.7	6056.9	4826.9	2806.9	1656.9	1449.6	1329.9	1224.6	1133.4	1081.9	1085.2
45°	6574.9	6428.9	4825.8	2612.6	1516.5	1354.0	1227.8	1078.6	994.1	945.9	943.6
47.5°	7055.5	6784.5	4766.6	2397.6	1380.4	1248.7	1069.9	955.7	899.7	870.1	863.6
50°	7551.5	7117.0	4665.6	2150.7	1241.1	1129.1	971.1	893.2	850.3	823.0	813.1
52.5°	8017.9	7418.7	4543.8	1870.8	1099.5	1012.8	927.2	866.8	821.8	791.1	778.0
55°	8451.2	7678.8	4371.5	1584.4	984.3	934.9	906.3	855.9	804.3	768.1	753.8
57.5°	8836.4	7847.7	4074.2	1315.6	902.0	881.1	884.4	837.2	778.0	747.2	727.5
60°	9156.7	7971.7	3634.1	1066.5	835.1	828.4	850.3	802.1	733.0	697.8	682.5
62.5°	9348.8	7969.5	3094.4	873.4	778.0	780.1	805.4	758.2	688.0	655.1	645.2
65°	9332.3	7774.2	2501.8	747.2	723.1	725.3	758.2	709.9	650.7	630.9	629.9
67.5°	9002.1	7298.0	1919.1	664.9	662.8	672.6	711.0	677.0	627.6	625.5	628.7
70°	8107.7	6309.4	1382.5	599.1	600.2	614.5	664.9	656.2	615.6	619.9	618.9
72.5°	6501.4	4810.4	928.3	530.0	531.1	554.1	621.0	639.7	603.5	661.6	670.5
75°	4329.9	3000.0	597.0	456.4	457.6	487.2	582.6	607.9	570.6	659.5	664.9
77.5°	2080.4	1348.6	432.3	384.1	384.1	411.4	503.7	544.3	486.1	512.4	469.7
80°	718.7	507.0	340.2	309.4	302.9	321.5	424.7	471.8	419.1	386.2	362.1
82.5°	283.1	263.3	273.3	240.3	218.3	230.4	330.3	389.5	308.3	278.7	277.6
85°	162.4	171.2	193.1	159.1	126.2	141.6	242.5	279.8	232.6	205.2	209.6
87.5°	43.9	60.4	88.9	82.3	57.1	60.4	115.2	154.7	133.9	103.1	106.4
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)