

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: P967736

Luminaire Tested: **NAV-SB5A-735-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967736
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-735-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19336.6 lumens
Efficiency: N/A
Efficacy: 136.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - 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

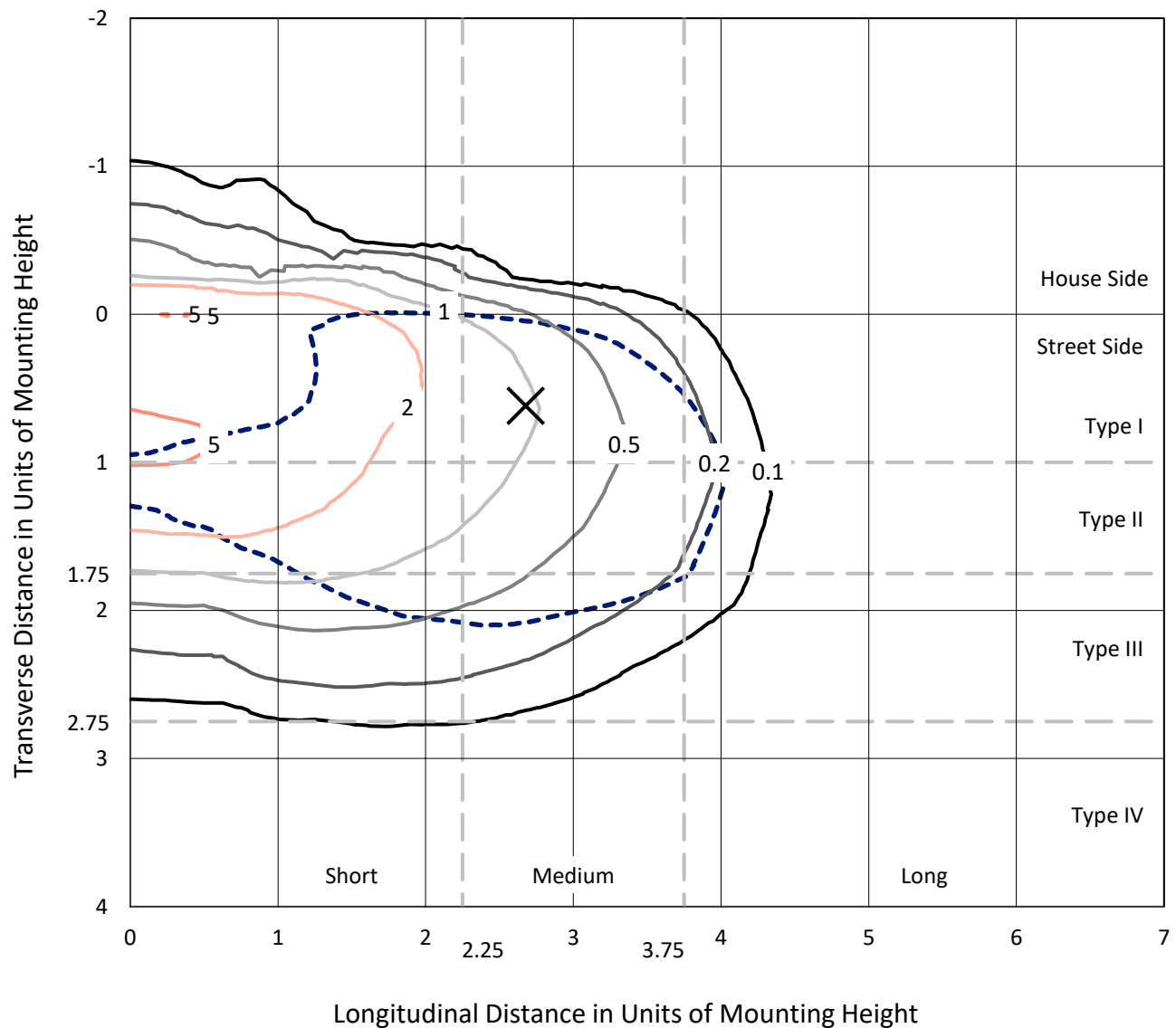


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Iso-Footcandle Lines of Horizontal Illumination

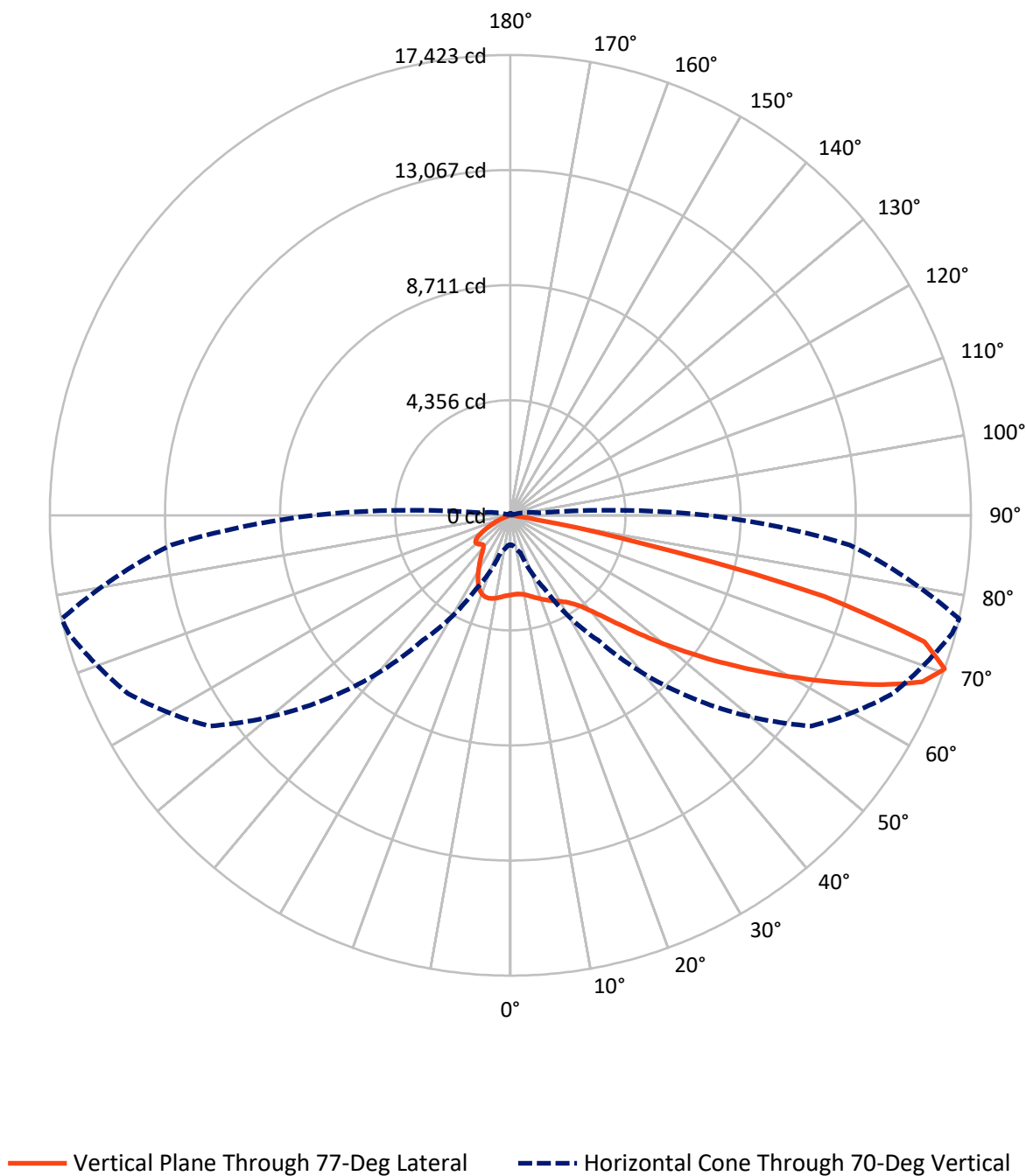
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2038.4	0.0	2038.4
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	17298.3	0.0	17298.3
	% Fixture	89.5	0.0	89.5
Total	Lumens	19336.6	0.0	19336.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.9	1.3
10°-20°	617.1	3.2
20°-30°	954.5	4.9
30°-40°	1731.9	9.0
40°-50°	3269.2	16.9
50°-60°	4723.7	24.4
60°-70°	5028.2	26.0
70°-80°	2664.6	13.8
80°-90°	87.5	0.5
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°	19336.6	100.0
0°-180°	19336.6	100.0

Coefficient of Utilization



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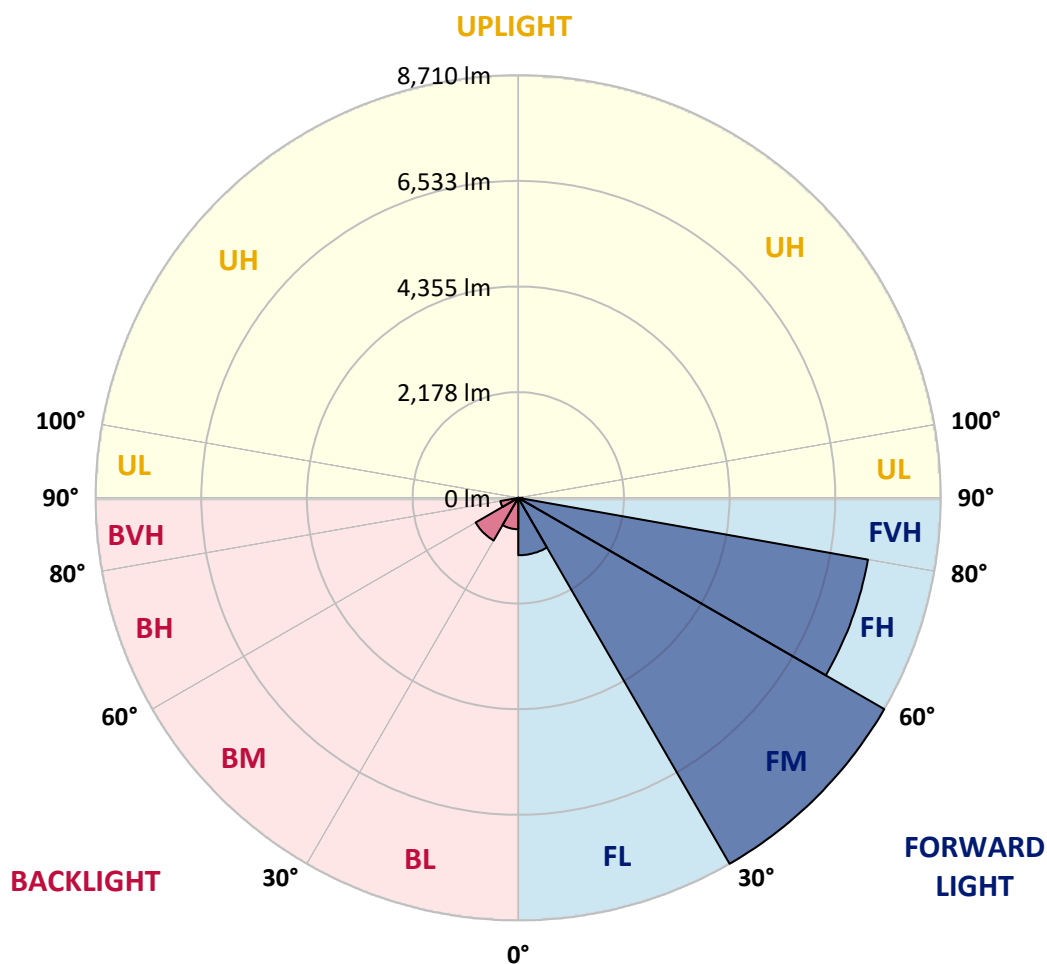
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1183.9	6.1			
FM	(30°-60°)	8710.1	45.0			
FH	(60°-80°)	7319.2	37.9			G3/7500
FVH	(80°-90°)	85.1	0.4			G1/100
BL	(0°-30°)	647.6	3.3	B2/1000		
BM	(30°-60°)	1014.7	5.2	B2/2500		
BH	(60°-80°)	373.7	1.9	B1/500		G1/500
BVH	(80°-90°)	2.4	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3016.2	3016.2	3016.2	3016.2	3016.2	3016.2	3016.2	3016.2	3016.2	3016.2	3016.2
2.5°	2831.8	2857.4	2853.8	2870.8	2877.0	2901.4	2925.8	2958.8	2995.4	2994.2	3018.6
5°	2671.8	2697.5	2703.5	2726.8	2756.0	2793.9	2844.0	2910.0	2978.3	2989.3	3038.1
7.5°	2482.5	2509.4	2525.3	2571.7	2625.4	2703.5	2785.3	2881.9	2995.4	3011.2	3105.3
10°	2293.2	2317.7	2338.4	2404.3	2489.8	2605.9	2739.0	2878.2	3030.8	3054.0	3187.1
12.5°	2176.1	2199.2	2222.4	2279.8	2386.1	2527.8	2708.5	2895.3	3089.5	3122.4	3298.2
15°	2134.6	2155.3	2173.6	2224.9	2323.8	2485.0	2702.3	2930.7	3164.0	3207.8	3432.5
17.5°	2140.6	2151.6	2163.8	2202.9	2299.4	2465.4	2713.3	2991.8	3251.8	3290.9	3566.9
20°	2176.1	2182.1	2183.4	2210.2	2295.7	2463.0	2735.3	3050.4	3334.8	3387.4	3699.9
22.5°	2221.2	2223.6	2221.2	2239.5	2318.9	2481.3	2764.6	3121.2	3427.7	3476.5	3834.3
25°	2432.4	2386.1	2327.5	2292.0	2358.0	2516.7	2808.6	3216.4	3529.1	3576.6	3965.0
27.5°	3088.2	2955.1	2745.1	2509.4	2438.6	2568.0	2869.6	3312.9	3631.6	3674.3	4105.4
30°	4153.0	3978.4	3621.8	3090.7	2697.5	2675.5	2949.0	3409.4	3740.3	3786.7	4255.6
32.5°	5220.3	5177.6	4766.0	4030.9	3279.9	2914.8	3080.8	3540.0	3884.3	3921.0	4458.3
35°	6299.8	6213.0	5876.0	5149.5	4177.5	3402.1	3300.7	3711.0	4073.7	4115.2	4753.8
37.5°	7126.4	7073.9	6865.1	6266.7	5242.3	4154.2	3676.8	3976.0	4348.4	4394.8	5132.4
40°	7856.7	7832.2	7761.4	7367.0	6432.9	5138.4	4261.7	4386.3	4729.3	4784.4	5596.4
42.5°	8430.6	8488.0	8528.3	8418.4	7660.0	6261.9	5048.1	4962.6	5260.6	5316.8	6187.4
45°	9017.9	9037.5	9199.9	9358.7	8878.8	7436.6	5934.6	5637.9	5921.2	5990.8	6895.7
47.5°	9395.3	9473.5	9759.2	10038.8	9903.2	8601.6	6887.1	6435.3	6686.9	6817.5	7689.3
50°	9423.3	9571.1	9964.3	10451.5	10649.3	9710.3	7922.6	7343.8	7611.2	7755.4	8536.8
52.5°	8955.7	9185.2	9794.6	10507.7	11052.4	10649.3	8993.6	8252.3	8595.4	8783.5	9416.1
55°	6866.4	7166.7	9155.9	10202.4	11068.3	11361.3	10036.4	9198.7	9692.0	9904.5	10366.0
57.5°	5982.3	6133.7	7198.5	9672.5	10774.0	11648.3	10979.1	10099.8	10885.1	11148.8	11263.6
60°	4977.3	5176.4	6037.2	8805.5	10374.6	11676.4	11811.9	11262.4	12178.2	12475.0	12086.6
62.5°	3382.5	3598.7	4454.6	7315.7	9828.8	11662.9	12494.4	12459.1	13615.5	13934.2	12783.9
65°	2095.4	2231.0	2795.2	5973.7	9065.6	11677.5	13208.9	13912.2	15132.1	15455.7	13323.7
67.5°	1655.9	1718.1	2012.4	4586.6	7750.4	11347.9	13922.0	15278.6	16559.6	16816.0	13488.5
70°	1112.4	1150.3	1464.1	3074.8	5766.1	9826.4	13908.5	15964.9	17294.7	17422.9	12887.7
72.5°	586.1	615.4	856.0	1423.8	3482.6	6984.8	11723.9	15144.3	16563.3	16370.3	11015.7
75°	293.0	341.9	576.4	722.9	1487.3	3895.4	7280.3	11940.1	13036.7	12289.3	7067.9
77.5°	222.2	268.7	476.2	476.2	517.7	1311.5	3083.3	6512.2	6006.7	5001.7	2074.7
80°	141.7	183.2	416.4	360.2	216.2	333.3	803.5	1824.4	1276.0	970.8	377.3
82.5°	83.0	119.7	346.8	238.1	120.8	123.3	227.1	388.3	331.0	257.7	116.0
85°	33.0	78.1	238.1	94.0	47.7	30.5	68.4	83.0	68.4	51.2	29.3
87.5°	0.0	18.3	41.5	0.0	3.7	2.5	4.9	6.1	6.1	4.9	9.7
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°	3016.2	3016.2	3016.2	3016.2	3016.2	3016.2	3016.2	3016.2	3016.2	3016.2	3016.2
2.5°	3029.6	3032.1	3039.3	3040.6	3023.4	3001.5	2993.0	2989.3	2974.7	2973.4	2975.9
5°	3066.2	3077.3	3066.2	3034.5	2958.8	2852.6	2771.9	2706.0	2646.1	2627.9	2616.8
7.5°	3139.5	3150.4	3117.5	2993.0	2802.5	2591.2	2400.8	2266.4	2145.5	2100.3	2082.0
10°	3244.5	3259.2	3155.4	2903.8	2566.8	2227.3	1905.0	1677.8	1500.8	1428.7	1398.2
12.5°	3376.4	3382.5	3176.2	2768.3	2260.3	1775.5	1318.8	1075.8	918.3	859.7	841.3
15°	3521.7	3513.2	3178.5	2583.9	1842.6	1255.3	860.9	707.0	643.5	624.0	624.0
17.5°	3674.3	3639.0	3129.7	2317.7	1384.8	858.4	638.7	602.0	591.0	586.1	584.9
20°	3824.6	3745.1	3040.6	1969.6	993.9	641.1	580.0	569.1	562.9	560.5	558.0
22.5°	3961.3	3825.8	2887.9	1565.5	721.7	566.6	548.3	538.5	527.6	522.6	521.4
25°	4094.4	3872.1	2673.0	1188.2	577.6	529.9	515.3	497.0	482.4	476.2	473.8
27.5°	4223.8	3901.5	2404.3	879.2	515.3	495.8	468.9	443.3	432.2	429.9	427.4
30°	4361.9	3911.2	2099.1	655.7	477.4	453.0	414.0	384.7	378.5	379.8	379.8
32.5°	4530.4	3925.9	1791.4	537.3	445.7	401.7	355.4	324.8	319.9	324.8	323.6
35°	4731.8	3955.2	1494.7	494.6	417.6	349.2	299.2	273.6	268.7	272.3	271.1
37.5°	5005.4	4002.8	1217.5	486.1	394.4	305.2	251.5	230.8	230.8	232.1	230.8
40°	5369.3	4129.8	969.5	479.9	382.2	272.3	212.5	204.0	207.6	210.0	210.0
42.5°	5812.6	4399.7	802.3	472.5	368.8	257.7	192.9	189.3	195.4	197.8	197.8
45°	6309.5	4741.6	743.6	460.3	356.6	267.4	184.4	179.5	186.9	188.1	189.3
47.5°	6823.6	5076.2	736.4	446.9	344.4	282.1	181.9	171.0	179.5	180.7	181.9
50°	7343.8	5294.7	743.6	426.2	324.8	282.1	183.2	162.4	169.7	173.4	174.7
52.5°	7867.7	5394.9	738.8	381.0	290.6	265.0	183.2	155.1	162.4	164.8	164.8
55°	8375.7	5375.4	664.3	313.9	246.6	234.4	178.2	148.9	153.9	155.1	155.1
57.5°	8777.4	5103.1	526.3	244.3	200.3	195.4	162.4	141.7	145.3	144.1	144.1
60°	8987.4	4504.7	376.1	188.1	157.5	153.9	142.9	131.9	134.3	128.2	127.0
62.5°	8989.9	3713.5	251.5	148.9	125.8	122.1	122.1	118.5	116.0	103.8	100.1
65°	8798.2	2835.5	167.3	118.5	101.4	95.2	102.6	101.4	92.8	75.7	73.3
67.5°	8363.5	1858.5	127.0	92.8	78.1	74.5	81.8	85.5	79.3	63.4	62.3
70°	7469.6	1081.9	105.1	72.1	58.6	54.9	65.9	73.3	65.9	51.2	48.9
72.5°	6204.5	583.7	85.5	53.7	40.3	36.6	52.5	59.9	52.5	37.8	36.6
75°	4026.0	312.6	65.9	35.4	20.8	23.2	39.1	44.0	36.6	24.4	21.9
77.5°	1351.8	138.0	41.5	17.1	9.7	9.7	23.2	26.9	17.1	8.5	7.3
80°	301.7	57.4	17.1	7.3	3.7	3.7	4.9	4.9	2.5	0.0	0.0
82.5°	98.9	23.2	7.3	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	37.8	8.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	14.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)