

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: P968257

Luminaire Tested: **NAV-SB5B-735-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968257
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-735-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24686.1 lumens
Efficiency: N/A
Efficacy: 135.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

Input Watts (W): 182.7
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

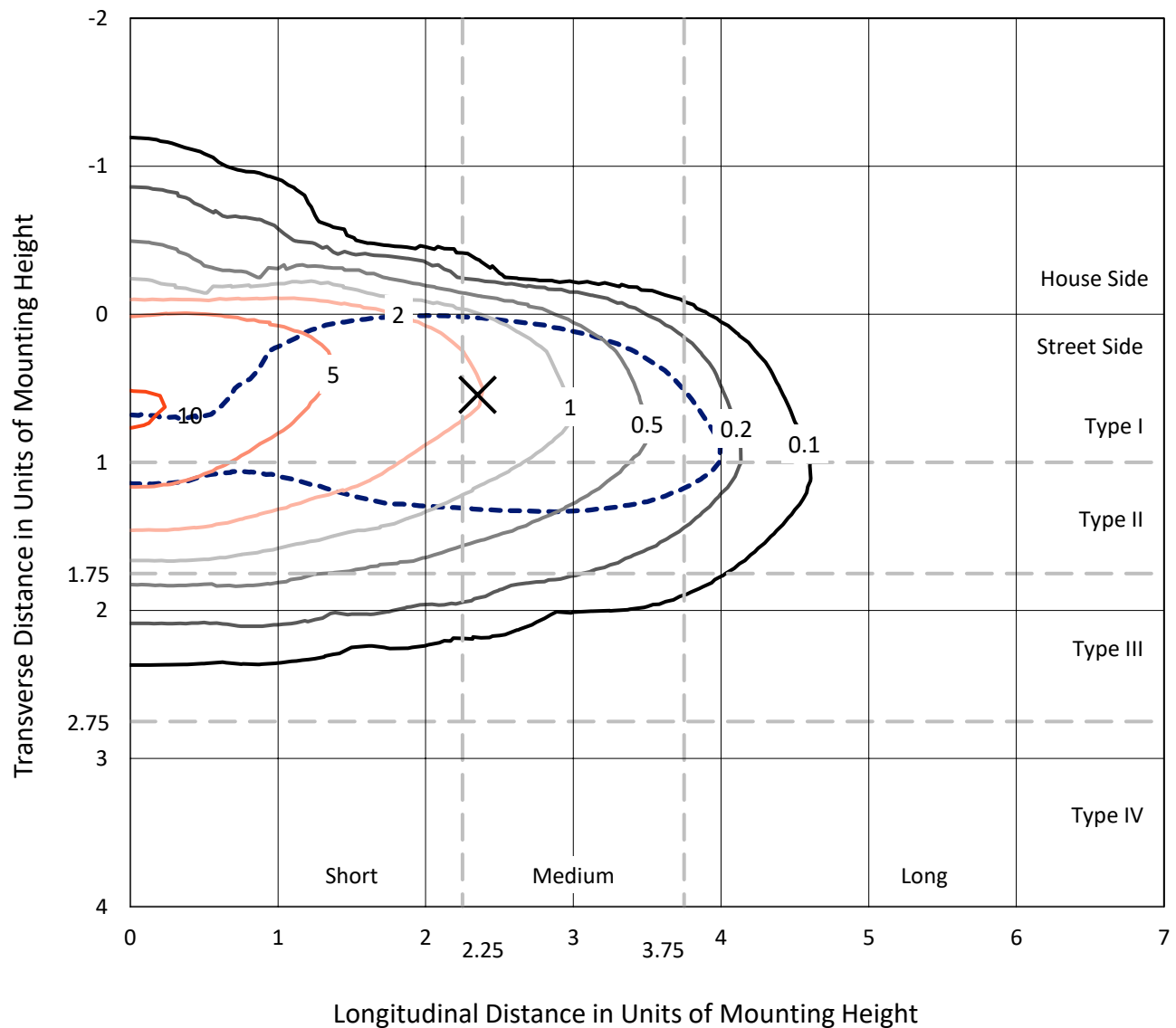


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Iso-Footcandle Lines of Horizontal Illumination

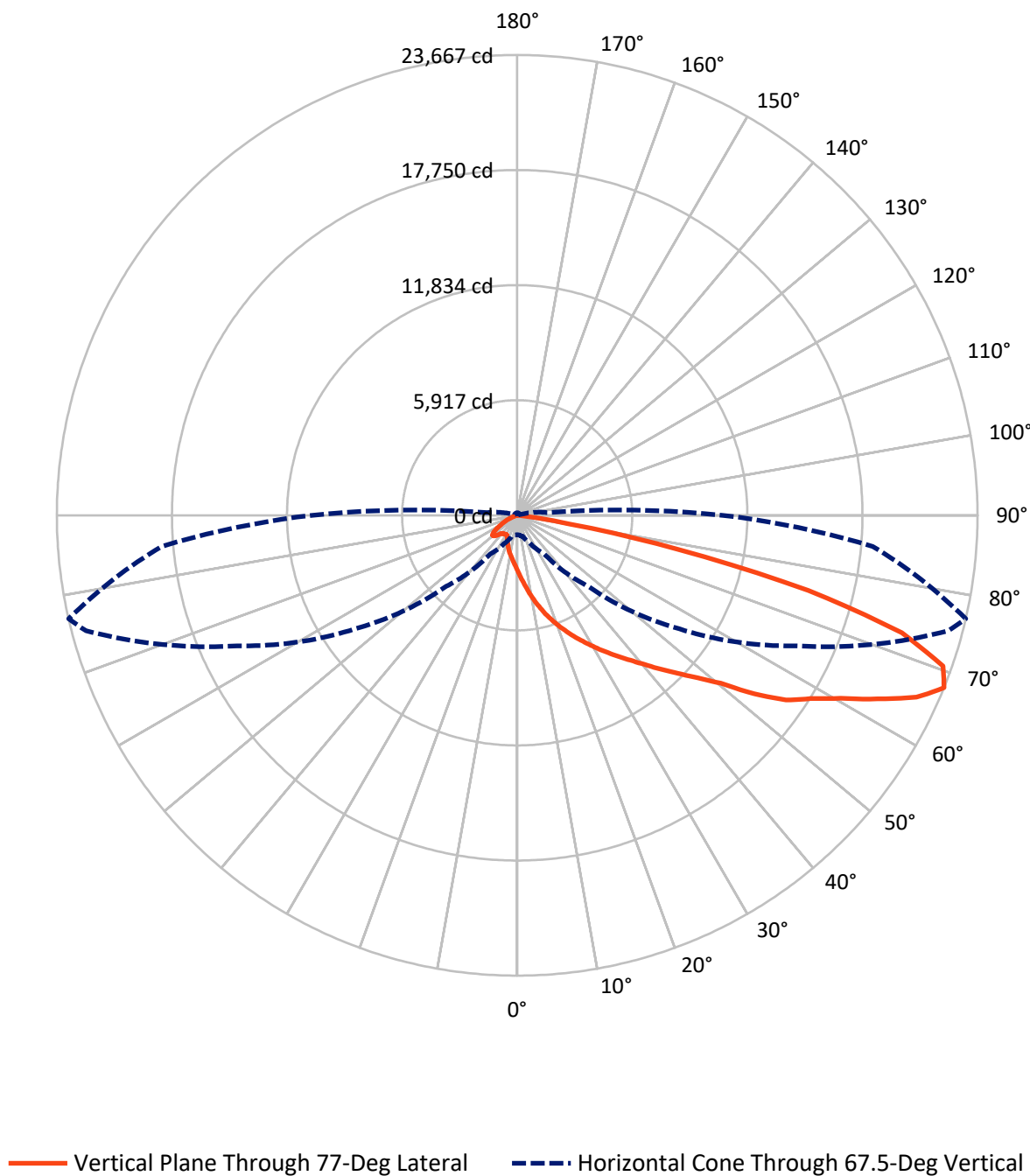
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.6 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1816.2	0.0	1816.2
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	22869.9	0.0	22869.9
	% Fixture	92.6	0.0	92.6
Total	Lumens	24686.1	0.0	24686.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.5	1.2
10°-20°	1017.5	4.1
20°-30°	1963.4	8.0
30°-40°	3408.6	13.8
40°-50°	4949.2	20.0
50°-60°	5683.5	23.0
60°-70°	4934.3	20.0
70°-80°	2324.1	9.4
80°-90°	114.9	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°	24686.1	100.0
0°-180°	24686.1	100.0

Coefficient of Utilization



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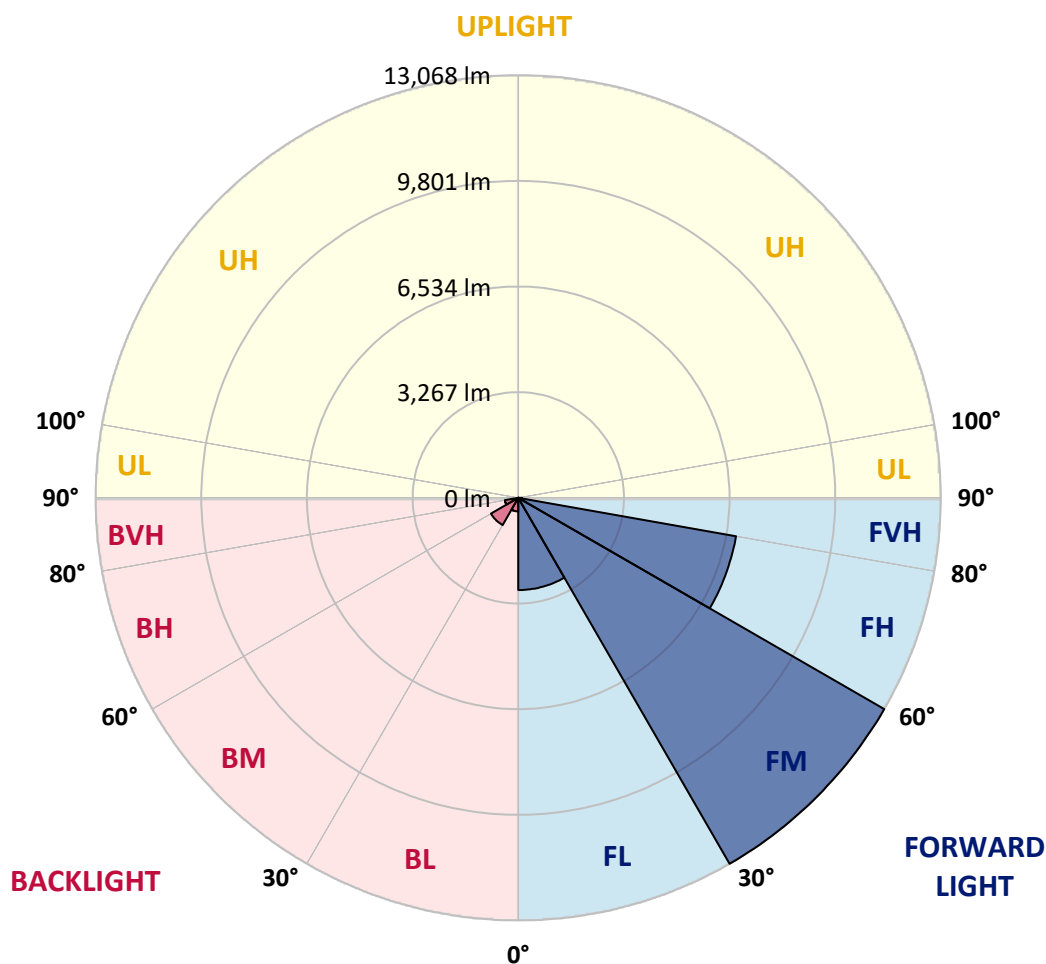
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2851.0	11.5			
FM	(30°-60°)	13068.2	52.9			
FH	(60°-80°)	6838.0	27.7			G3/7500
FVH	(80°-90°)	112.8	0.5			G2/225
BL	(0°-30°)	420.5	1.7	B1/500		
BM	(30°-60°)	973.1	3.9	B1/1000		
BH	(60°-80°)	420.5	1.7	B1/500		G1/500
BVH	(80°-90°)	2.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	2846.6	2846.6	2846.6	2846.6	2846.6	2846.6	2846.6	2846.6	2846.6	2846.6	2846.6
2.5°	3941.2	3965.7	3930.5	3863.0	3761.9	3695.9	3534.9	3383.2	3214.6	3160.9	2992.3
5°	4804.3	4825.7	4785.8	4712.2	4577.3	4448.6	4237.0	3919.7	3590.2	3484.4	3185.5
7.5°	5443.5	5455.8	5440.4	5372.9	5244.2	5098.6	4862.5	4486.9	3997.9	3881.4	3423.1
10°	5903.4	5943.3	5938.6	5912.5	5826.7	5708.6	5457.3	5029.6	4454.8	4304.5	3691.3
12.5°	6208.4	6252.9	6278.9	6337.2	6332.6	6257.4	6036.7	5584.5	4910.1	4733.8	3993.3
15°	6297.3	6344.9	6444.5	6579.4	6699.0	6737.2	6582.4	6128.7	5411.3	5186.0	4303.0
17.5°	6246.8	6320.4	6439.9	6653.0	6915.1	7088.3	7071.5	6654.5	5866.6	5609.0	4606.5
20°	6358.6	6429.1	6522.7	6702.1	7007.1	7321.4	7447.0	7157.3	6318.8	6048.9	4925.3
22.5°	6978.0	6965.7	6974.9	7004.0	7186.4	7497.6	7756.7	7614.1	6766.4	6490.5	5262.6
25°	7959.0	7903.9	7810.3	7652.4	7606.4	7756.7	8026.5	8018.8	7238.6	6942.7	5607.5
27.5°	9084.2	9075.0	8855.8	8475.6	8261.0	8202.8	8331.5	8412.8	7706.1	7390.4	5953.9
30°	10161.8	10186.3	9890.5	9467.4	9073.5	8845.0	8728.6	8786.8	8181.3	7873.2	6311.1
32.5°	11100.0	11126.1	10804.1	10309.0	9821.6	9545.6	9300.3	9156.2	8699.5	8363.7	6703.5
35°	11892.6	11918.6	11549.2	11001.9	10482.3	10232.4	9954.9	9561.0	9220.6	8908.0	7140.5
37.5°	12600.7	12593.2	12098.0	11546.1	11035.7	10837.8	10692.3	10059.1	9757.2	9455.2	7624.9
40°	13019.2	13051.4	12628.4	12019.8	11524.7	11380.6	11371.3	10676.9	10376.5	10083.6	8155.2
42.5°	13141.9	13198.6	12892.0	12392.2	11943.1	11786.8	12027.5	11345.3	11097.0	10811.8	8754.6
45°	12921.2	12976.3	12836.8	12490.4	12228.2	12127.1	12591.6	12038.2	11866.5	11584.4	9430.6
47.5°	12277.3	12346.3	12380.1	12306.5	12303.4	12406.1	13097.4	12767.8	12780.1	12491.9	10214.0
50°	11031.0	11147.6	11457.2	11717.8	12120.9	12626.9	13589.6	13558.9	13810.2	13561.9	11234.9
52.5°	8765.4	8930.9	9997.8	10710.6	11616.6	12585.5	14130.6	14828.2	15617.6	15254.3	12674.3
55°	7043.9	7043.9	7911.5	9245.2	10632.4	12312.6	14366.7	15652.9	16848.5	16762.7	13687.6
57.5°	5742.4	5811.3	6364.7	7543.6	9208.4	11662.7	14512.4	16171.0	17840.3	17777.5	14677.9
60°	3544.1	3692.9	4738.3	5901.8	7588.1	10505.2	14420.4	16695.3	19043.7	19094.3	15870.5
62.5°	1995.9	2051.0	2517.1	4246.3	5900.3	8949.3	13716.8	16988.0	20582.8	20797.4	17100.0
65°	1378.1	1405.7	1585.1	2642.8	4089.9	7125.1	12341.7	16805.6	22124.9	22558.7	18142.4
67.5°	1001.0	1014.9	1126.7	1614.2	2426.7	5166.0	10186.3	15885.9	22942.0	23667.0	18341.7
70°	769.6	778.7	860.0	1060.8	1433.3	3188.5	7397.9	14057.1	22350.2	23216.4	17320.7
72.5°	625.5	634.7	697.5	784.8	950.4	1885.5	4483.9	11415.8	19738.1	20673.2	14745.3
75°	527.4	539.6	596.3	653.0	745.0	1211.0	2103.2	7949.8	14843.4	15456.6	10253.8
77.5°	292.8	269.8	484.4	541.1	628.5	766.5	984.1	4678.5	8313.2	8483.3	4549.8
80°	182.4	188.6	384.8	435.3	482.9	386.3	450.7	1801.2	2881.9	2737.9	881.4
82.5°	10.8	24.5	295.8	314.3	331.1	165.5	170.1	611.6	694.4	637.7	156.3
85°	0.0	0.0	134.9	108.9	115.0	47.6	49.1	142.6	93.5	101.2	30.6
87.5°	0.0	0.0	0.0	3.1	0.0	4.6	9.2	12.3	4.6	6.1	10.8
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°	2846.6	2846.6	2846.6	2846.6	2846.6	2846.6	2846.6	2846.6	2846.6	2846.6	2846.6
2.5°	2885.0	2777.6	2560.0	2346.9	2173.7	2012.8	1897.8	1788.9	1733.8	1730.7	1727.6
5°	2972.4	2747.0	2311.7	1926.9	1617.2	1368.9	1208.0	1093.0	1034.7	1014.9	1011.8
7.5°	3095.0	2756.2	2094.0	1559.0	1194.1	981.1	889.1	852.3	840.1	826.3	823.2
10°	3249.9	2777.6	1899.3	1255.5	941.3	833.9	797.1	781.8	772.6	763.4	760.3
12.5°	3423.1	2797.6	1706.1	1042.4	827.8	772.6	746.5	728.2	715.9	705.2	702.1
15°	3591.7	2809.8	1505.3	893.7	769.6	725.1	697.5	677.5	660.7	648.4	646.9
17.5°	3758.8	2826.7	1316.8	804.8	722.0	677.5	650.0	625.5	611.6	597.9	596.3
20°	3944.3	2823.7	1139.0	741.9	674.4	630.1	601.0	577.9	564.2	548.8	547.2
22.5°	4116.0	2808.4	982.6	688.3	625.5	582.5	550.3	527.4	513.5	501.2	499.7
25°	4313.7	2796.1	852.3	639.2	579.4	536.5	501.2	479.8	464.5	453.8	452.2
27.5°	4503.7	2777.6	757.3	594.8	534.9	493.6	459.9	435.3	421.6	413.9	413.9
30°	4690.8	2773.1	722.0	551.9	495.2	453.8	420.0	397.0	386.3	383.2	381.7
32.5°	4916.1	2785.3	737.4	536.5	458.4	417.0	384.8	367.9	357.2	357.2	357.2
35°	5156.8	2782.3	760.3	550.3	433.8	380.2	355.7	344.9	334.2	334.2	334.2
37.5°	5458.8	2786.9	778.7	573.3	424.7	349.5	335.7	322.0	315.8	315.8	315.8
40°	5909.5	2938.7	769.6	593.3	421.6	328.0	300.4	295.8	291.3	291.3	291.3
42.5°	6461.3	3268.2	781.8	594.8	420.0	312.7	275.9	285.2	274.4	272.9	271.3
45°	7065.3	3628.5	860.0	562.6	418.5	305.0	263.6	274.4	257.6	257.6	257.6
47.5°	7664.7	3985.6	939.7	516.6	413.9	303.5	253.0	246.8	242.2	243.7	243.7
50°	8491.0	4276.9	970.4	453.8	403.1	300.4	233.0	234.5	231.4	234.5	234.5
52.5°	9390.7	4338.2	933.6	383.2	372.5	291.3	219.2	225.3	223.9	226.8	226.8
55°	9951.8	4272.3	771.1	318.9	325.0	254.5	205.4	217.7	217.7	217.7	217.7
57.5°	10531.3	3991.8	547.2	259.0	269.8	208.5	193.1	210.0	208.5	206.9	206.9
60°	10948.2	3538.0	360.3	213.1	214.6	171.7	179.4	197.7	196.2	188.6	188.6
62.5°	11259.4	3036.8	231.4	180.9	164.0	154.9	164.0	179.4	173.2	156.3	153.3
65°	11224.2	2342.3	177.8	154.9	134.9	134.9	142.6	156.3	138.0	110.4	107.3
67.5°	10569.6	1585.1	147.2	130.3	113.5	111.9	118.1	130.3	118.1	93.5	90.4
70°	9400.0	1036.3	118.1	101.2	90.4	82.8	95.0	111.9	99.6	75.1	72.1
72.5°	7629.5	631.6	88.9	73.6	65.9	53.6	75.1	91.9	79.7	55.1	52.1
75°	4936.1	322.0	61.3	47.6	35.3	32.2	55.1	69.0	55.1	33.7	29.1
77.5°	1888.6	134.9	33.7	21.4	18.3	15.4	30.6	41.4	23.0	7.7	6.1
80°	363.3	56.7	16.9	10.8	9.2	6.1	4.6	3.1	0.0	0.0	0.0
82.5°	62.8	18.3	6.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	21.4	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.7	0.0	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)