

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: P967729

Luminaire Tested: **NAV-SB5A-735-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967729
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-735-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16960.7 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

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

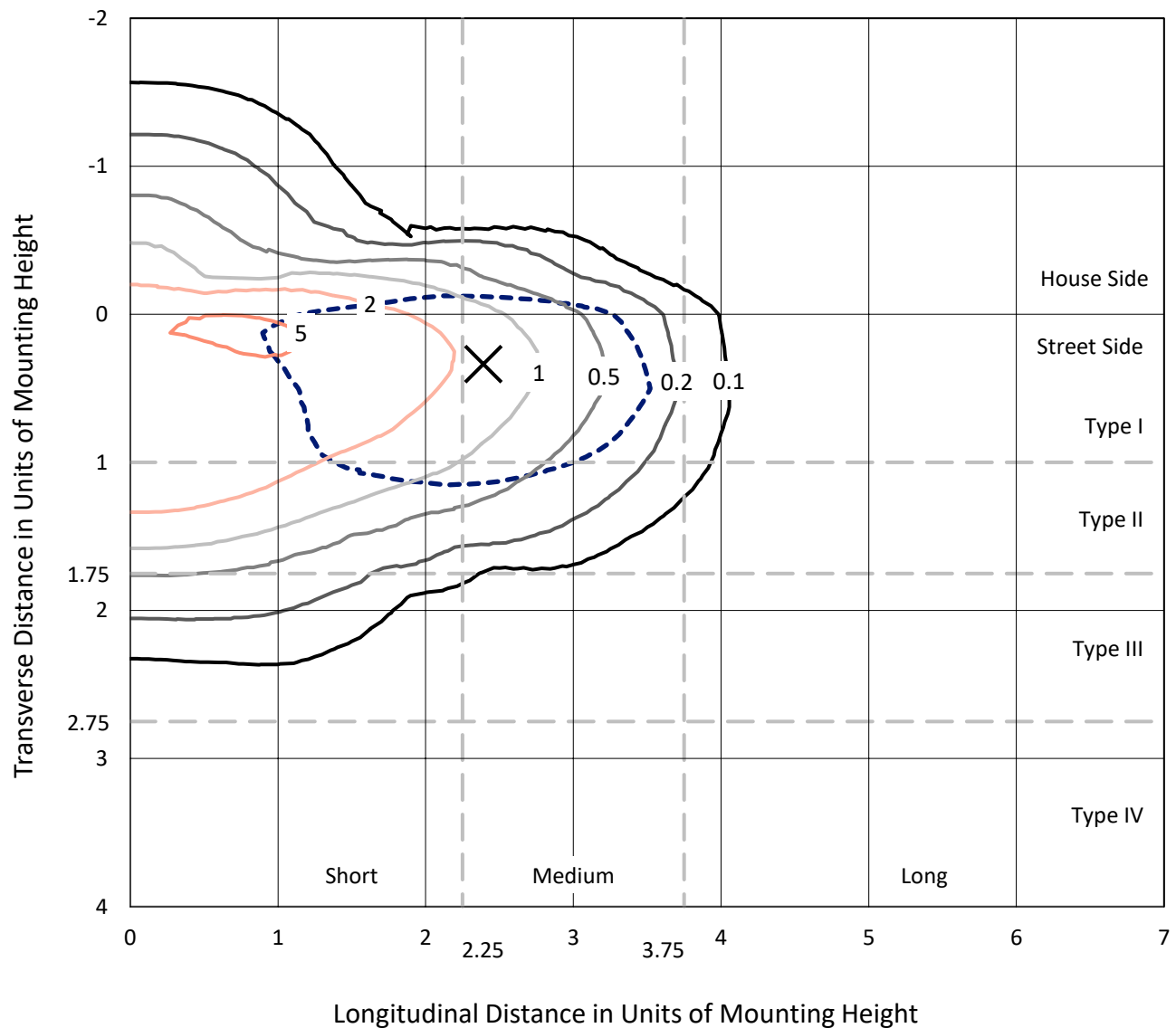


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

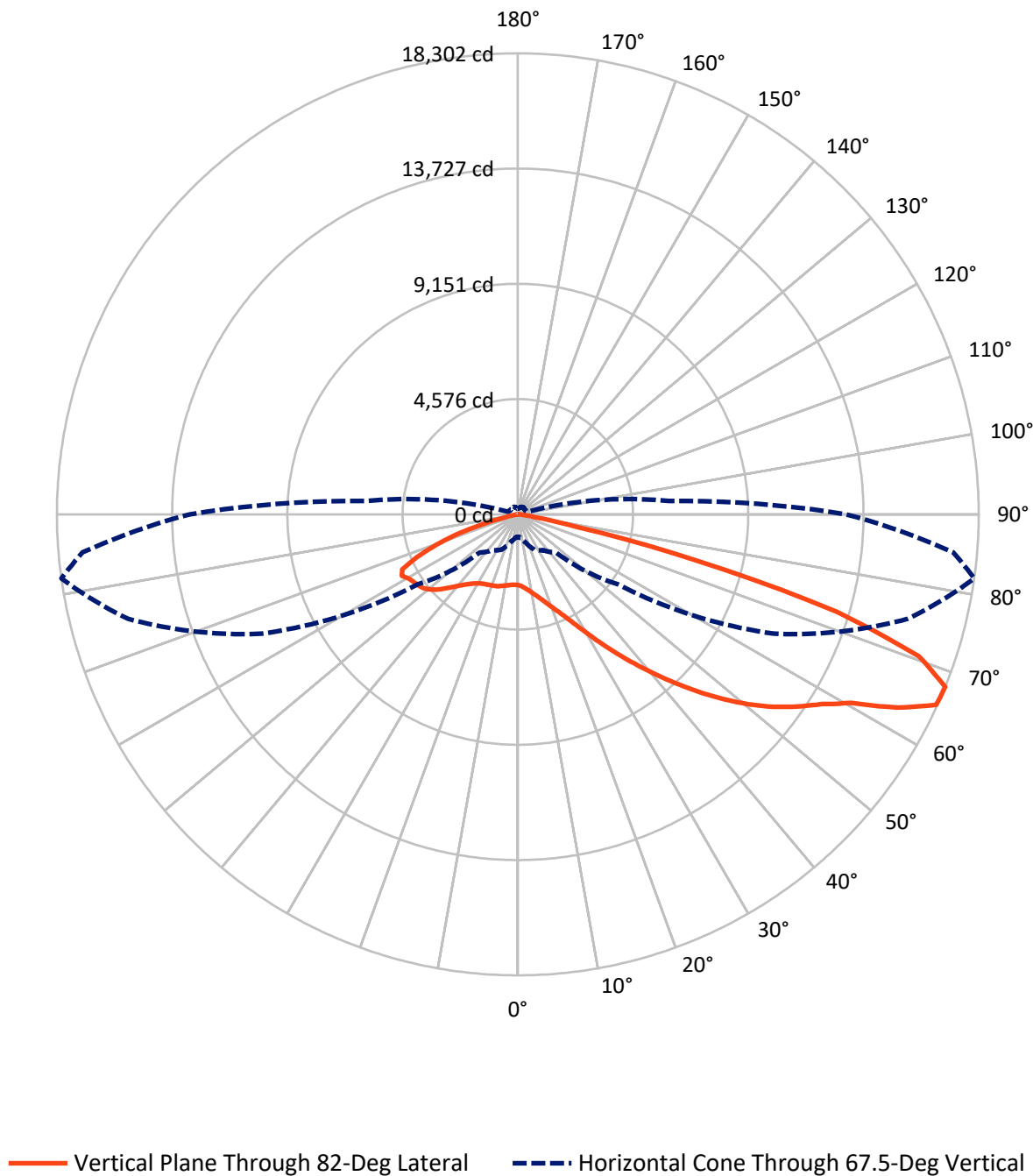


Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3072.3	0.0	3072.3
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	13888.4	0.0	13888.4
	% Fixture	81.9	0.0	81.9
Total	Lumens	16960.7	0.0	16960.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.3	1.5
10°-20°	650.5	3.8
20°-30°	1041.9	6.1
30°-40°	1842.4	10.9
40°-50°	3228.1	19.0
50°-60°	4305.4	25.4
60°-70°	4008.1	23.6
70°-80°	1538.3	9.1
80°-90°	95.5	0.6
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°	16960.7	100.0
0°-180°	16960.7	100.0

Coefficient of Utilization



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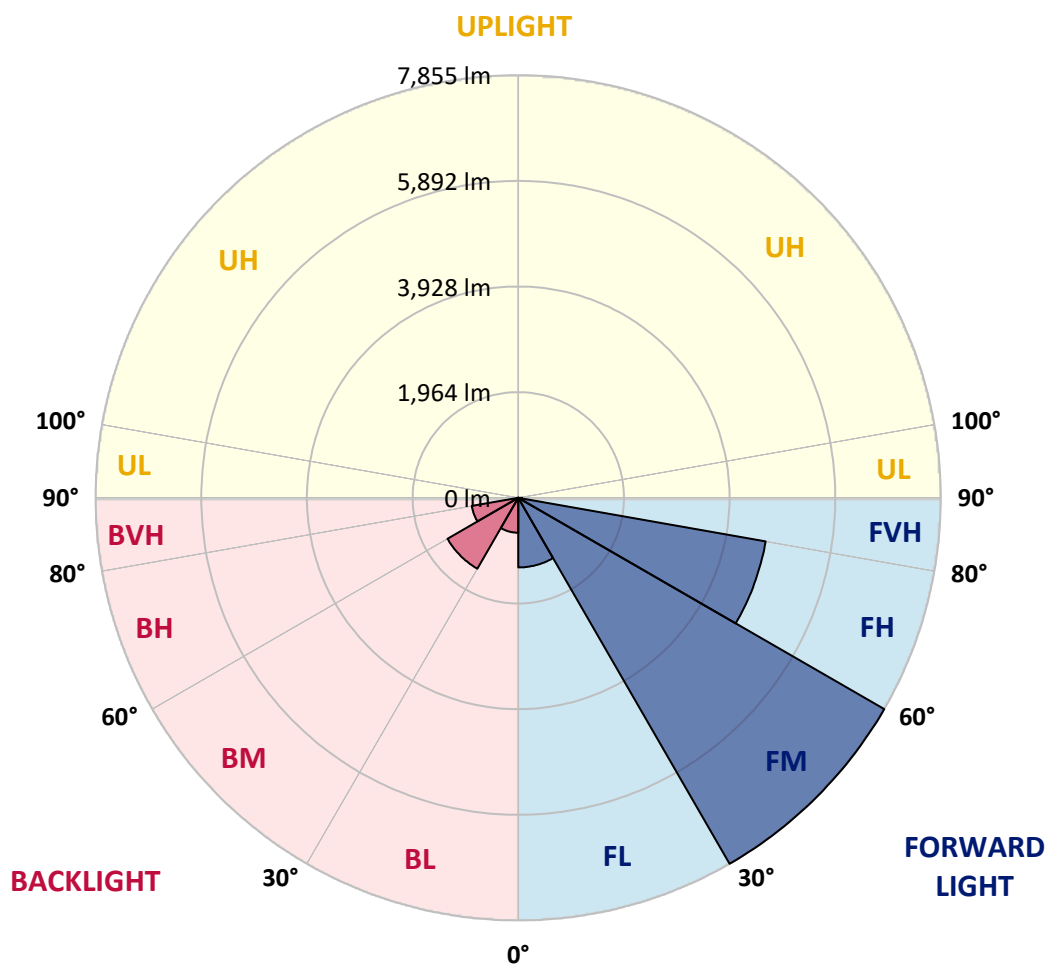
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1293.9	7.6			
FM	(30°-60°)	7855.5	46.3			
FH	(60°-80°)	4669.5	27.5			G2/5000
FVH	(80°-90°)	69.5	0.4			G1/100
BL	(0°-30°)	648.9	3.8	B2/1000		
BM	(30°-60°)	1520.4	9.0	B2/2500		
BH	(60°-80°)	876.9	5.2	B2/1000		G2/1000
BVH	(80°-90°)	26.1	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8
2.5°	2969.7	2986.8	2977.1	2972.2	2963.7	2951.5	2941.6	2911.2	2879.4	2858.6	2851.3
5°	3029.6	3046.7	3045.5	3050.4	3056.4	3060.1	3057.7	3023.5	2978.3	2942.9	2922.2
7.5°	2978.3	2997.8	3013.7	3038.2	3080.9	3126.0	3148.1	3140.7	3094.4	3045.5	3019.9
10°	2833.0	2853.8	2891.6	2949.0	3039.4	3137.1	3218.9	3256.7	3227.4	3173.7	3138.2
12.5°	2566.8	2587.6	2662.0	2786.6	2938.1	3107.8	3264.1	3365.4	3372.8	3319.1	3277.5
15°	2267.6	2288.4	2367.8	2524.1	2754.9	3027.1	3288.5	3480.2	3545.0	3498.5	3448.4
17.5°	2082.0	2100.3	2160.2	2286.0	2526.5	2866.0	3279.9	3602.4	3750.1	3713.5	3653.6
20°	2025.8	2041.7	2069.8	2157.7	2358.0	2698.7	3223.7	3717.1	3971.1	3950.3	3883.2
22.5°	2085.7	2100.3	2108.8	2148.0	2273.8	2588.7	3152.9	3834.3	4227.5	4230.0	4148.2
25°	2223.6	2238.3	2228.6	2253.0	2307.9	2554.6	3126.0	3972.3	4549.9	4576.7	4484.0
27.5°	2450.8	2452.0	2428.8	2427.6	2436.1	2605.9	3154.1	4120.1	4956.6	5006.6	4891.8
30°	2906.3	2887.9	2798.9	2702.3	2658.4	2759.7	3232.3	4294.6	5436.5	5525.6	5381.5
32.5°	3608.4	3581.6	3418.0	3187.1	2955.1	3007.7	3372.8	4493.7	5959.0	6120.3	5944.5
35°	4370.4	4363.1	4192.1	3849.0	3443.6	3360.6	3601.1	4755.1	6529.4	6785.8	6577.0
37.5°	5078.7	5075.0	4977.3	4573.1	4079.8	3852.7	3967.5	5097.0	7139.9	7511.1	7264.5
40°	5725.9	5736.8	5639.1	5277.7	4780.7	4484.0	4465.6	5519.5	7818.9	8301.2	8008.1
42.5°	6285.1	6297.4	6198.5	5931.0	5473.1	5182.5	5077.4	6037.2	8482.0	9149.9	8803.1
45°	6664.9	6740.6	6725.9	6512.2	6183.8	5882.2	5812.6	6686.9	9237.8	10049.8	9643.2
47.5°	6772.4	6842.0	6951.9	6981.2	6780.9	6484.2	6567.2	7469.6	10002.3	10951.1	10488.2
50°	6507.4	6572.1	6800.5	7104.5	7243.7	7152.1	7301.1	8308.5	10784.9	11849.8	11317.4
52.5°	5984.8	6050.7	6338.9	6819.9	7387.8	7676.0	8037.4	9135.2	11543.3	12700.9	12102.6
55°	5228.8	5298.4	5668.5	6213.0	7113.1	7892.1	8651.7	9960.7	12238.1	13466.6	12810.9
57.5°	4200.7	4252.0	4636.6	5398.6	6421.9	7677.2	9104.7	10861.9	12892.7	14218.8	13513.0
60°	2737.8	2783.0	3229.9	4079.8	5276.5	6959.2	9195.1	11866.9	13762.1	15197.0	14459.4
62.5°	1820.7	1851.3	2116.2	2740.2	3715.9	5580.5	8666.4	12669.2	15037.0	16899.2	16082.2
65°	1249.2	1279.7	1544.7	1979.5	2400.8	3691.4	7146.0	12562.9	16192.1	18250.9	17285.0
67.5°	891.4	917.1	1141.7	1552.1	1737.7	2144.3	4844.3	11205.1	16026.1	18302.2	17349.8
70°	638.7	653.3	839.0	1208.9	1381.1	1288.3	2693.8	8569.8	14031.9	16900.4	16028.5
72.5°	446.9	451.8	582.5	920.8	1112.4	940.2	1282.2	5713.7	10612.8	13265.0	12426.2
75°	302.9	308.9	392.0	675.3	892.7	718.0	679.0	3063.8	6230.2	7342.6	6581.8
77.5°	185.6	188.1	252.8	461.6	668.0	547.0	437.2	1298.1	2410.5	2366.5	2017.3
80°	105.1	105.1	161.2	287.0	455.5	352.9	306.5	552.0	763.2	670.3	591.0
82.5°	58.6	59.9	117.3	178.2	301.7	208.8	168.5	255.2	329.7	291.8	254.0
85°	24.4	26.9	72.1	84.3	144.1	103.8	68.4	107.4	122.1	108.6	79.3
87.5°	2.5	3.7	21.9	15.9	17.1	20.8	9.7	20.8	17.1	17.1	12.2
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°	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8
2.5°	2828.1	2809.8	2763.4	2709.7	2638.9	2604.6	2558.3	2526.5	2499.7	2502.1	2477.6
5°	2883.1	2836.7	2732.9	2603.4	2442.3	2327.5	2205.4	2121.1	2052.7	2038.0	2005.1
7.5°	2958.8	2885.5	2703.5	2470.4	2198.0	1991.7	1807.3	1688.8	1604.5	1577.7	1550.8
10°	3056.4	2950.3	2665.7	2303.1	1911.1	1648.5	1450.7	1357.9	1300.5	1280.9	1266.3
12.5°	3170.0	3024.8	2615.7	2099.1	1615.5	1362.7	1237.0	1190.6	1172.3	1166.1	1162.6
15°	3312.9	3117.5	2540.0	1857.3	1365.2	1188.2	1134.5	1128.3	1130.8	1128.3	1127.1
17.5°	3482.6	3218.9	2416.6	1608.2	1196.7	1099.0	1079.4	1084.3	1090.5	1089.3	1086.8
20°	3668.3	3319.1	2259.1	1387.2	1081.9	1035.6	1024.5	1029.4	1034.3	1031.9	1030.6
22.5°	3879.5	3426.5	2084.4	1215.0	1005.0	976.9	964.7	966.0	966.0	961.0	958.6
25°	4132.3	3545.0	1901.3	1093.0	946.4	924.3	909.7	904.9	897.5	882.8	880.5
27.5°	4433.9	3670.7	1725.5	1007.5	900.0	879.2	862.1	849.9	831.6	807.2	804.7
30°	4773.4	3823.4	1576.4	953.7	863.4	842.6	823.1	804.7	777.9	747.3	744.9
32.5°	5172.7	3986.9	1467.8	918.3	830.4	808.4	785.2	763.2	733.9	703.4	704.6
35°	5648.9	4184.8	1404.2	893.9	804.7	775.4	749.8	725.4	703.4	676.5	674.0
37.5°	6165.5	4394.8	1384.8	881.6	787.6	742.4	713.1	696.1	693.6	677.7	676.5
40°	6730.9	4644.0	1399.4	874.3	769.3	710.7	679.0	675.3	681.4	653.3	654.6
42.5°	7329.2	4939.5	1423.8	865.8	743.6	679.0	648.4	648.4	643.5	604.4	604.4
45°	7976.3	5280.2	1448.2	845.0	713.1	647.2	624.0	615.4	594.7	556.9	555.7
47.5°	8628.4	5626.9	1466.6	807.2	676.5	620.3	599.5	580.0	549.5	515.3	514.1
50°	9247.6	5938.3	1447.0	751.0	635.0	594.7	572.7	545.8	512.9	489.6	486.1
52.5°	9800.7	6208.2	1364.0	685.0	591.0	567.8	548.3	520.2	493.3	468.9	466.5
55°	10281.9	6426.7	1217.5	622.8	552.0	544.6	525.1	489.6	453.0	432.2	429.9
57.5°	10743.4	6592.9	1034.3	571.4	516.5	519.0	489.6	458.0	423.7	401.8	399.3
60°	11357.7	6815.1	848.7	523.9	478.7	486.1	454.3	431.0	388.3	360.2	356.6
62.5°	12339.5	7160.6	674.0	465.2	434.7	437.2	423.7	395.6	344.4	311.4	308.9
65°	13118.6	7033.7	531.2	401.8	384.7	388.3	388.3	357.8	302.9	265.0	261.3
67.5°	13030.6	6022.6	423.7	339.5	337.0	339.5	348.0	322.4	268.7	238.1	233.2
70°	12003.7	4790.4	339.5	282.1	293.0	287.0	311.4	294.3	241.8	211.3	207.6
72.5°	9794.7	3450.9	258.9	233.2	224.7	234.4	280.8	265.0	201.5	167.3	163.6
75°	5723.4	1841.4	192.9	184.4	162.4	195.4	249.1	225.9	153.9	123.3	119.7
77.5°	1863.4	642.3	141.7	135.5	120.8	157.5	212.5	190.4	125.8	97.7	94.0
80°	499.5	194.1	96.5	89.2	78.1	117.3	168.5	151.4	90.4	63.4	62.3
82.5°	200.3	81.8	56.2	50.0	42.7	80.6	133.1	122.1	67.1	40.3	40.3
85°	64.7	26.9	20.8	15.9	19.6	50.0	79.3	83.0	47.7	20.8	15.9
87.5°	8.5	3.7	3.7	4.9	3.7	8.5	24.4	23.2	13.4	2.5	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)