

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: P968913

Luminaire Tested: **NAV-SB5C-827-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968913
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26445 lumens
Efficiency: N/A
Efficacy: 106.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G4

Input Watts (W): 249.5
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



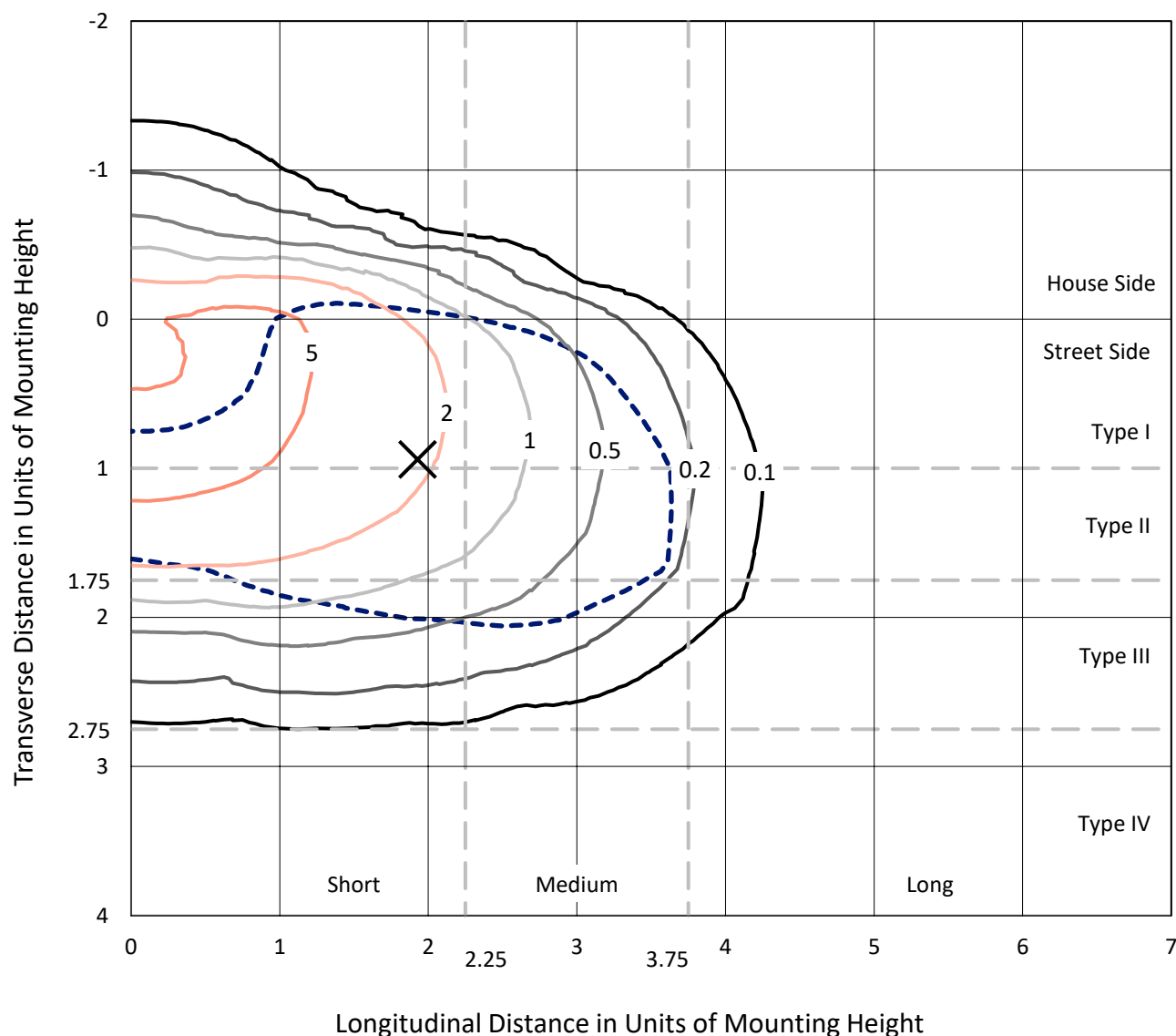
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



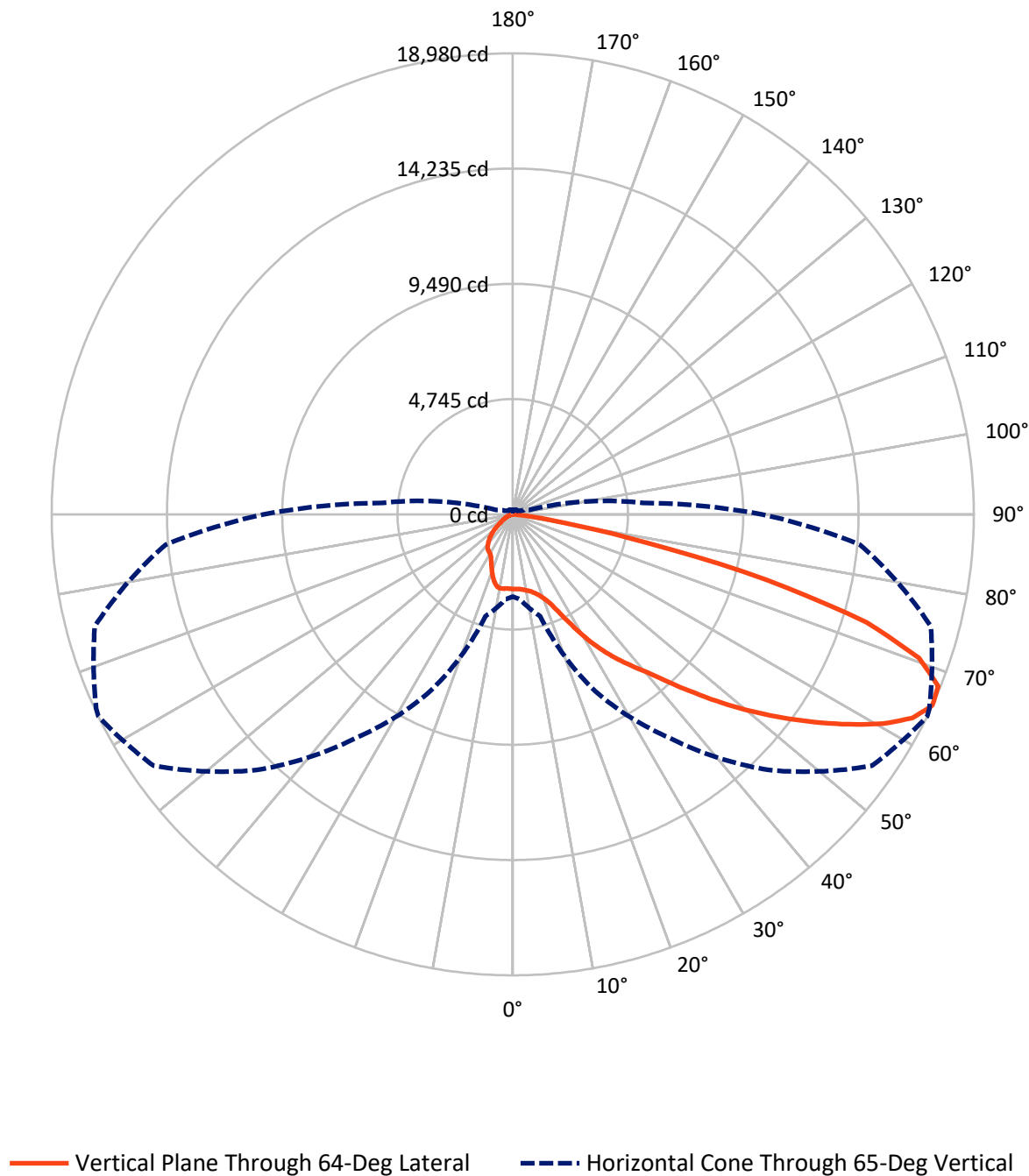
Based on 25 foot mounting height. Maximum calculated value = 7.7 fc

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	3536.5	0.0	3536.5
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	22908.5	0.0	22908.5
	% Fixture	86.6	0.0	86.6
Total	Lumens	26445.0	0.0	26445.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.8	1.1
10°-20°	769.7	2.9
20°-30°	1458.5	5.5
30°-40°	2951.3	11.2
40°-50°	5027.5	19.0
50°-60°	6837.0	25.9
60°-70°	6420.3	24.3
70°-80°	2572.3	9.7
80°-90°	124.6	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°	26445.0	100.0
0°-180°	26445.0	100.0

Coefficient of Utilization



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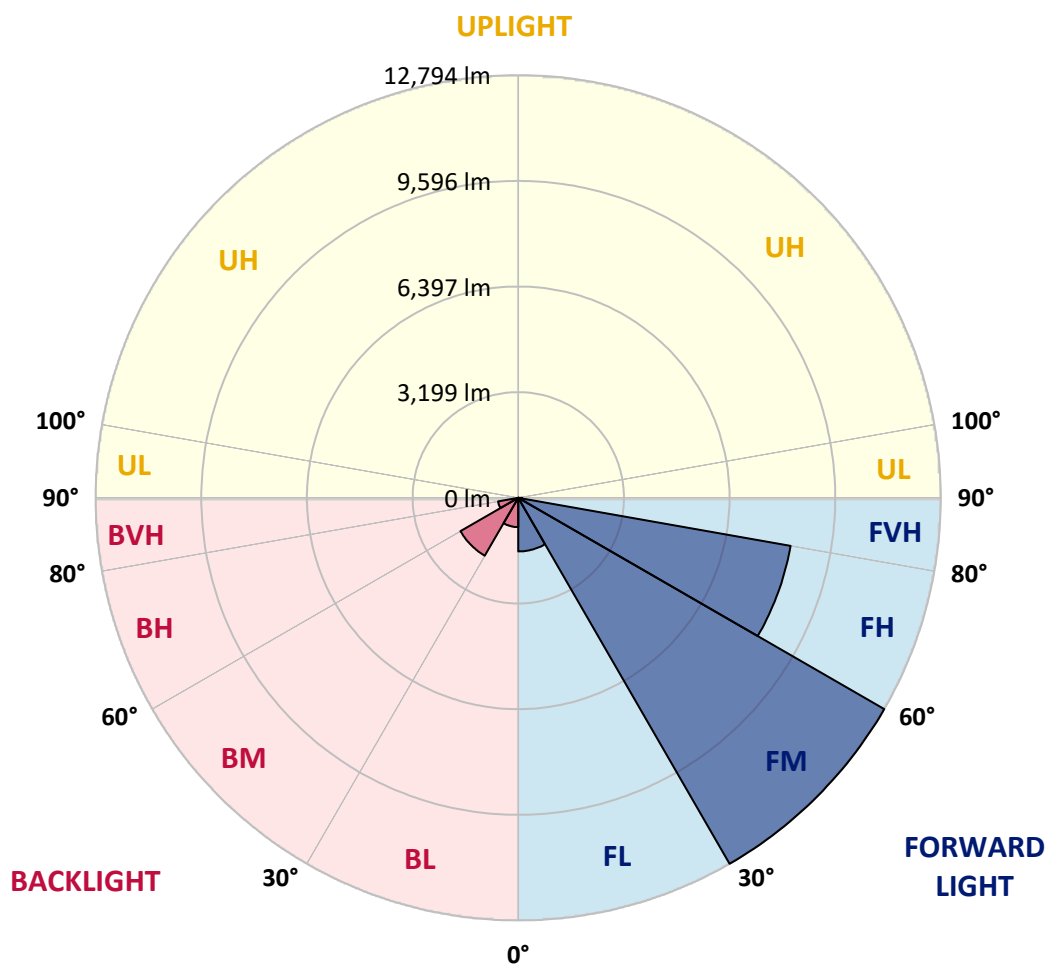
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1624.0	6.1			
FM	(30°-60°)	12794.1	48.4			
FH	(60°-80°)	8371.9	31.7			G4/12000
FVH	(80°-90°)	118.5	0.4			G2/225
BL	(0°-30°)	887.9	3.4	B2/1000		
BM	(30°-60°)	2021.8	7.6	B2/2500		
BH	(60°-80°)	620.7	2.3	B2/1000		G2/1000
BVH	(80°-90°)	6.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	3075.8	3075.8	3075.8	3075.8	3075.8	3075.8	3075.8	3075.8	3075.8	3075.8	3075.8
2.5°	3065.2	3086.5	3081.1	3075.8	3074.1	3077.6	3079.4	3077.6	3077.6	3077.6	3079.4
5°	3006.7	3024.5	3024.5	3036.9	3054.6	3075.8	3091.8	3095.3	3098.9	3104.2	3102.5
7.5°	2895.0	2909.2	2919.8	2960.6	3004.9	3061.7	3109.5	3134.3	3137.8	3157.4	3164.5
10°	2818.7	2836.5	2854.2	2896.8	2960.6	3045.7	3127.3	3187.5	3196.4	3242.5	3263.7
12.5°	2815.3	2833.0	2856.0	2902.1	2976.6	3067.0	3166.2	3253.1	3269.0	3336.5	3380.8
15°	2852.5	2873.7	2895.0	2951.7	3031.5	3141.4	3247.8	3356.0	3371.8	3467.6	3515.4
17.5°	2928.7	2957.0	2973.0	3029.7	3114.9	3237.2	3377.2	3501.3	3515.4	3627.2	3687.4
20°	3079.4	3113.0	3118.4	3164.5	3247.8	3379.0	3545.6	3699.8	3717.6	3845.2	3912.6
22.5°	3391.4	3439.3	3396.7	3419.7	3494.2	3625.4	3806.2	4001.2	4026.1	4171.4	4231.7
25°	3940.9	4008.4	3898.4	3859.4	3891.3	4027.8	4254.8	4501.2	4529.6	4646.5	4676.7
27.5°	5020.6	4933.7	4767.1	4604.0	4508.3	4586.3	4841.6	5146.4	5181.9	5295.4	5259.9
30°	6206.6	6130.4	5905.2	5543.6	5316.7	5304.3	5540.0	5880.4	5921.2	6029.4	5921.2
32.5°	7394.4	7321.7	7077.1	6632.1	6238.6	6043.5	6206.6	6584.2	6605.5	6674.6	6515.1
35°	8562.6	8488.2	8243.6	7787.9	7303.9	6860.7	6828.9	7254.3	7261.4	7334.1	7096.6
37.5°	9738.0	9676.0	9415.4	8968.6	8491.8	7880.1	7584.1	7889.0	7897.8	7968.8	7722.4
40°	10576.6	10603.2	10424.1	10078.4	9668.9	9000.5	8431.4	8564.5	8511.3	8630.1	8482.9
42.5°	11296.3	11349.5	11193.5	11019.8	10782.3	10193.6	9481.0	9458.0	9372.8	9436.7	9284.2
45°	11918.6	11963.0	11822.9	11782.1	11776.7	11363.8	10628.0	10489.7	10370.9	10358.5	10175.9
47.5°	12147.3	12232.3	12292.7	12429.2	12695.1	12521.4	11814.0	11599.5	11466.6	11369.0	11080.0
50°	12234.2	12324.6	12530.2	12927.3	13556.6	13631.2	12994.7	12753.6	12590.5	12413.3	11987.8
52.5°	12117.1	12278.5	12555.0	13223.4	14136.4	14521.1	14127.6	13916.5	13730.4	13441.4	12810.3
55°	11427.5	11588.9	12154.3	13219.8	14425.3	15145.1	15198.3	15104.4	14895.2	14439.6	13475.2
57.5°	9973.9	10213.2	11108.4	12769.6	14420.0	15682.3	16247.8	16315.2	16081.2	15428.8	13998.1
60°	7959.9	8284.4	9376.4	11771.5	13975.1	15973.0	17167.9	17504.7	17256.6	16403.8	14421.9
62.5°	5554.2	5930.0	6963.6	10207.9	12957.4	15763.9	17839.8	18462.1	18274.1	17276.1	14584.9
65°	3387.8	3508.4	4341.6	8032.6	11227.2	14888.0	18047.2	18979.7	18917.7	17809.7	14343.8
67.5°	2256.7	2357.8	2597.1	5508.1	8715.2	13138.3	17550.9	18889.3	18907.0	17722.8	13460.9
70°	1359.8	1446.6	1602.6	3203.4	5648.2	10399.3	16013.8	17737.0	17839.8	16561.6	11787.4
72.5°	560.2	618.7	760.6	1451.9	2925.1	6600.2	12751.8	15228.4	15467.8	13925.4	9046.6
75°	317.3	347.5	446.8	728.7	1269.4	3075.8	7724.1	10810.6	11163.4	9598.0	5442.5
77.5°	210.9	225.2	288.9	471.6	714.4	1049.5	3301.0	5632.3	6305.9	5242.2	2356.1
80°	141.9	154.3	198.5	315.6	464.4	450.3	1051.2	2086.6	2567.0	1801.1	574.4
82.5°	95.7	97.5	141.9	207.5	294.3	218.0	310.3	648.8	815.5	521.2	218.0
85°	54.9	53.2	104.6	120.5	131.2	90.4	94.0	195.1	255.3	219.9	124.1
87.5°	7.1	10.7	40.8	31.9	17.7	19.5	19.5	33.7	49.6	53.2	26.5
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°	3075.8	3075.8	3075.8	3075.8	3075.8	3075.8	3075.8	3075.8	3075.8	3075.8	3075.8
2.5°	3079.4	3077.6	3072.2	3067.0	3054.6	3047.4	3051.0	3047.4	3045.7	3047.4	3054.6
5°	3102.5	3097.1	3082.9	3065.2	3040.4	3010.2	2990.7	2962.4	2935.8	2919.8	2923.4
7.5°	3164.5	3159.2	3139.7	3090.0	3010.2	2884.4	2769.1	2668.1	2591.8	2547.5	2549.3
10°	3263.7	3254.9	3224.8	3114.9	2905.7	2630.9	2402.2	2212.5	2088.3	2029.9	2024.6
12.5°	3380.8	3370.1	3316.9	3091.8	2707.1	2278.1	1962.5	1751.5	1636.3	1584.9	1579.5
15°	3519.0	3504.9	3400.2	2981.8	2418.1	1888.0	1599.1	1441.3	1366.8	1320.7	1322.6
17.5°	3691.0	3666.2	3462.3	2817.0	2104.3	1590.2	1375.7	1257.0	1191.4	1147.0	1143.5
20°	3914.4	3873.6	3512.0	2620.2	1815.4	1402.3	1225.0	1125.8	1076.1	1037.1	1030.0
22.5°	4226.4	4167.9	3572.2	2407.5	1611.5	1272.8	1113.4	1040.7	999.9	955.5	948.4
25°	4612.8	4543.7	3646.6	2210.7	1471.4	1161.2	1031.8	971.5	923.6	872.2	866.9
27.5°	5153.6	5029.5	3735.3	2049.4	1350.8	1065.5	957.4	889.9	835.0	792.4	783.6
30°	5756.3	5552.4	3813.3	1951.9	1241.0	976.8	859.8	792.4	741.1	710.9	705.6
32.5°	6327.1	6050.6	3864.8	1909.3	1141.6	875.8	753.5	680.8	641.8	632.9	638.2
35°	6866.1	6500.9	3859.4	1868.6	1053.1	774.7	648.8	574.4	544.3	549.6	549.6
37.5°	7486.6	6981.4	3822.2	1804.7	980.4	682.5	558.4	492.8	466.3	468.0	475.1
40°	8208.1	7536.2	3799.2	1684.2	900.6	597.5	484.0	430.8	411.3	404.2	402.4
42.5°	8977.6	8073.4	3802.6	1547.6	801.3	521.2	432.6	388.3	370.5	365.2	363.5
45°	9750.4	8585.7	3808.0	1405.9	696.7	462.7	395.3	358.1	347.5	340.4	340.4
47.5°	10477.3	9021.8	3708.8	1253.4	593.9	418.4	365.2	340.4	331.5	322.7	322.7
50°	11154.6	9312.5	3469.4	1076.1	512.3	382.9	342.1	324.4	315.6	306.7	306.7
52.5°	11681.1	9358.7	3074.1	893.5	455.6	356.3	328.0	312.0	301.3	292.5	290.7
55°	11915.1	9069.7	2512.1	723.3	411.3	333.3	313.8	297.9	285.5	276.5	274.8
57.5°	11854.7	8461.6	1959.0	581.5	368.8	310.3	296.0	285.5	271.2	257.1	255.3
60°	11558.7	7647.9	1476.7	484.0	329.7	285.5	276.5	267.7	248.2	226.9	223.3
62.5°	11046.4	6625.0	1053.1	400.7	287.2	257.1	253.5	246.4	218.0	179.1	175.5
65°	10262.8	5382.3	709.1	333.3	246.4	225.2	226.9	214.5	177.3	132.9	129.5
67.5°	9117.6	3935.7	453.9	273.1	205.6	187.9	189.7	182.6	150.7	113.5	108.1
70°	7658.6	2606.1	296.0	207.5	164.9	145.3	156.0	157.7	127.6	92.1	88.7
72.5°	5614.5	1538.8	207.5	154.3	120.5	101.1	127.6	131.2	102.8	69.2	65.6
75°	3199.9	730.4	156.0	111.7	74.4	70.9	99.3	99.3	70.9	46.1	42.5
77.5°	1343.8	304.9	109.9	72.7	42.5	40.8	67.3	62.0	35.5	21.3	21.3
80°	388.3	136.5	58.5	35.5	17.7	16.0	26.5	19.5	8.8	3.6	3.6
82.5°	152.4	60.3	23.1	14.1	7.1	7.1	3.6	0.0	0.0	0.0	0.0
85°	90.4	24.8	10.7	5.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	23.1	5.3	3.6	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)