

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: P970494

Luminaire Tested: **NAV-SB6B-827-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P970494
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-SB6B-827-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 450mA 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: 23869.2 lumens
Efficiency: N/A
Efficacy: 108.3 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): 220.4
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

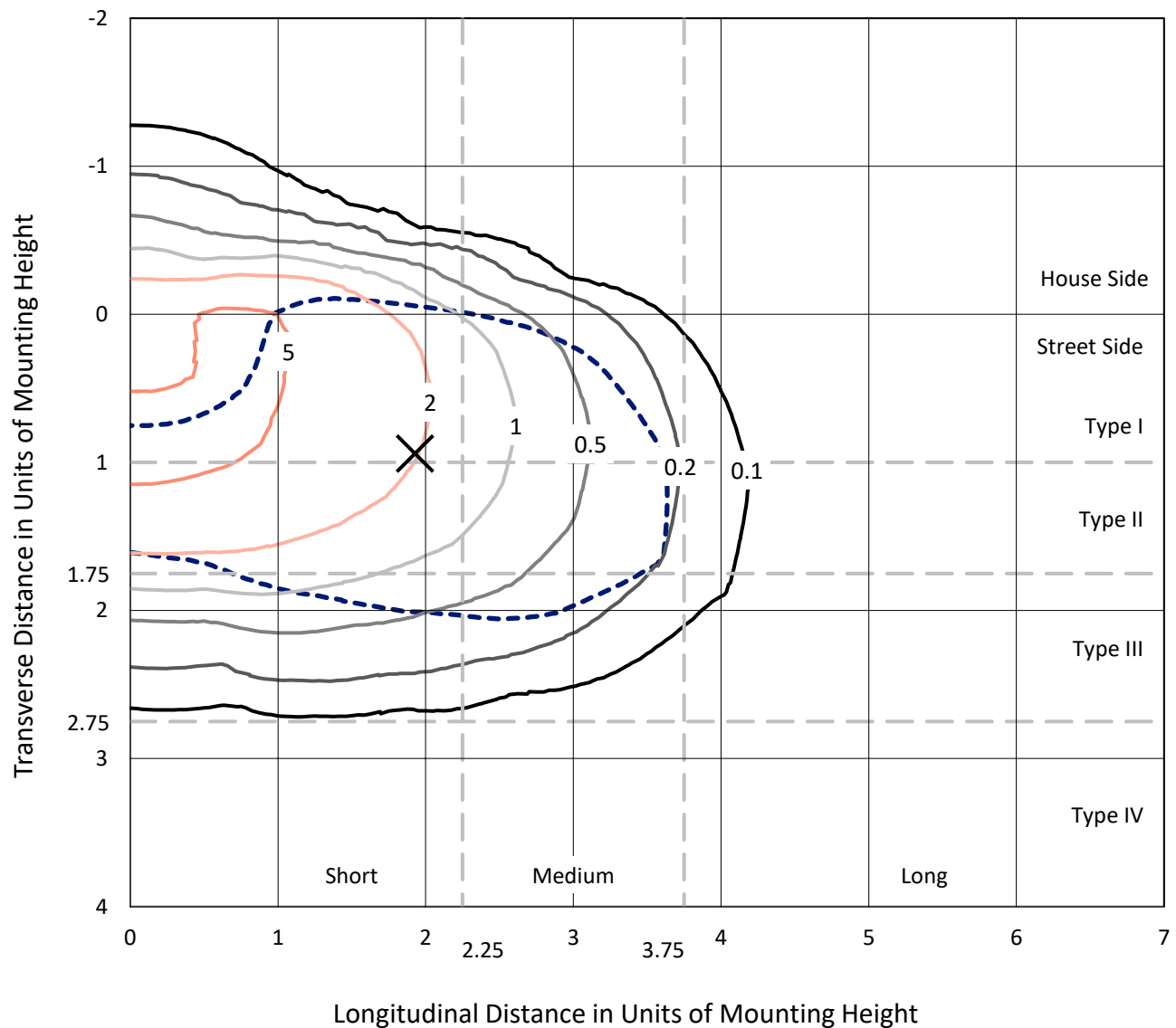


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Iso-Footcandle Lines of Horizontal Illumination

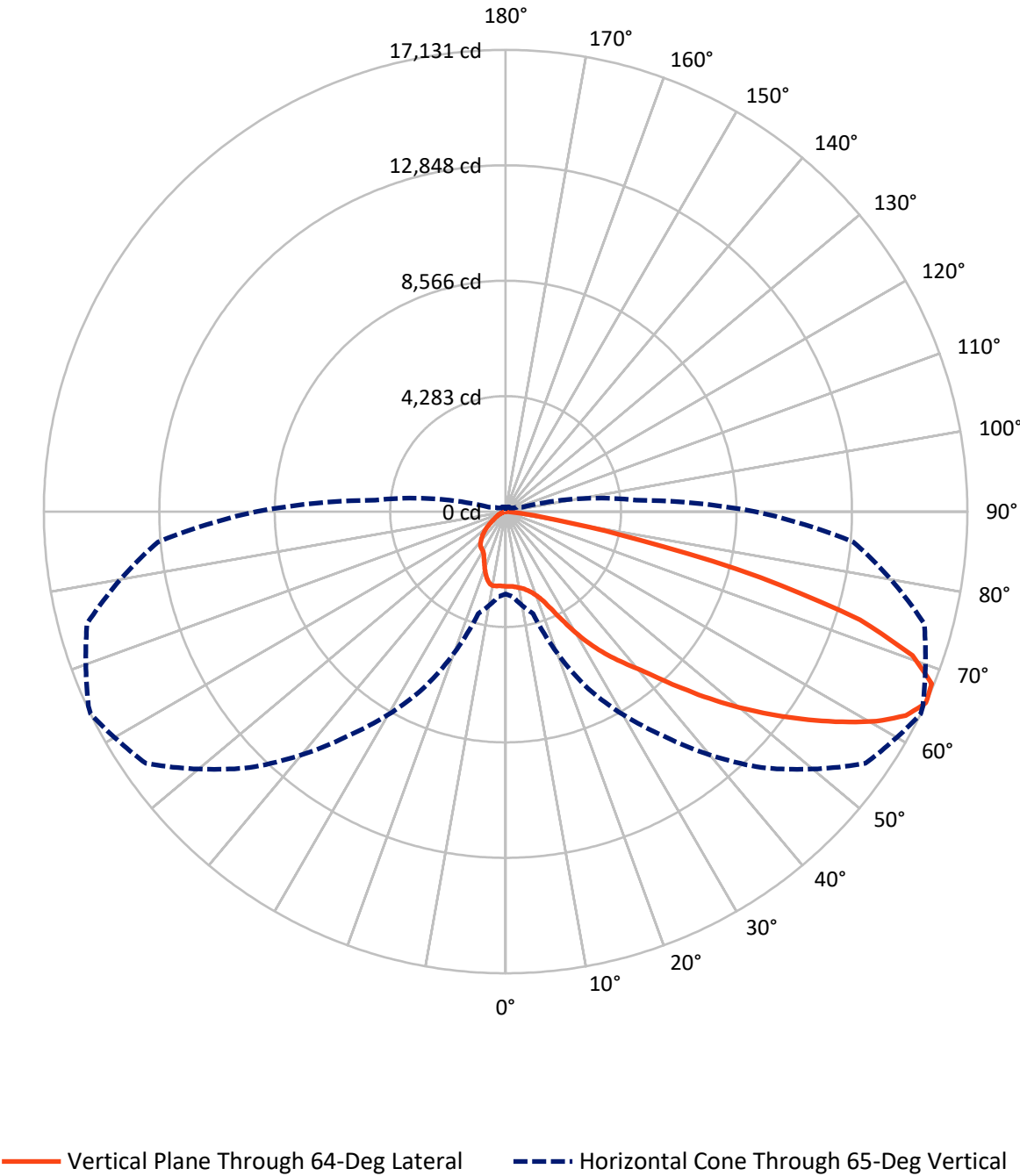
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 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	3192.0	0.0	3192.0
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	20677.1	0.0	20677.1
	% Fixture	86.6	0.0	86.6
Total	Lumens	23869.2	0.0	23869.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.1	1.1
10°-20°	694.7	2.9
20°-30°	1316.4	5.5
30°-40°	2663.8	11.2
40°-50°	4537.8	19.0
50°-60°	6171.1	25.9
60°-70°	5795.0	24.3
70°-80°	2321.7	9.7
80°-90°	112.5	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°	23869.2	100.0
0°-180°	23869.2	100.0

Coefficient of Utilization



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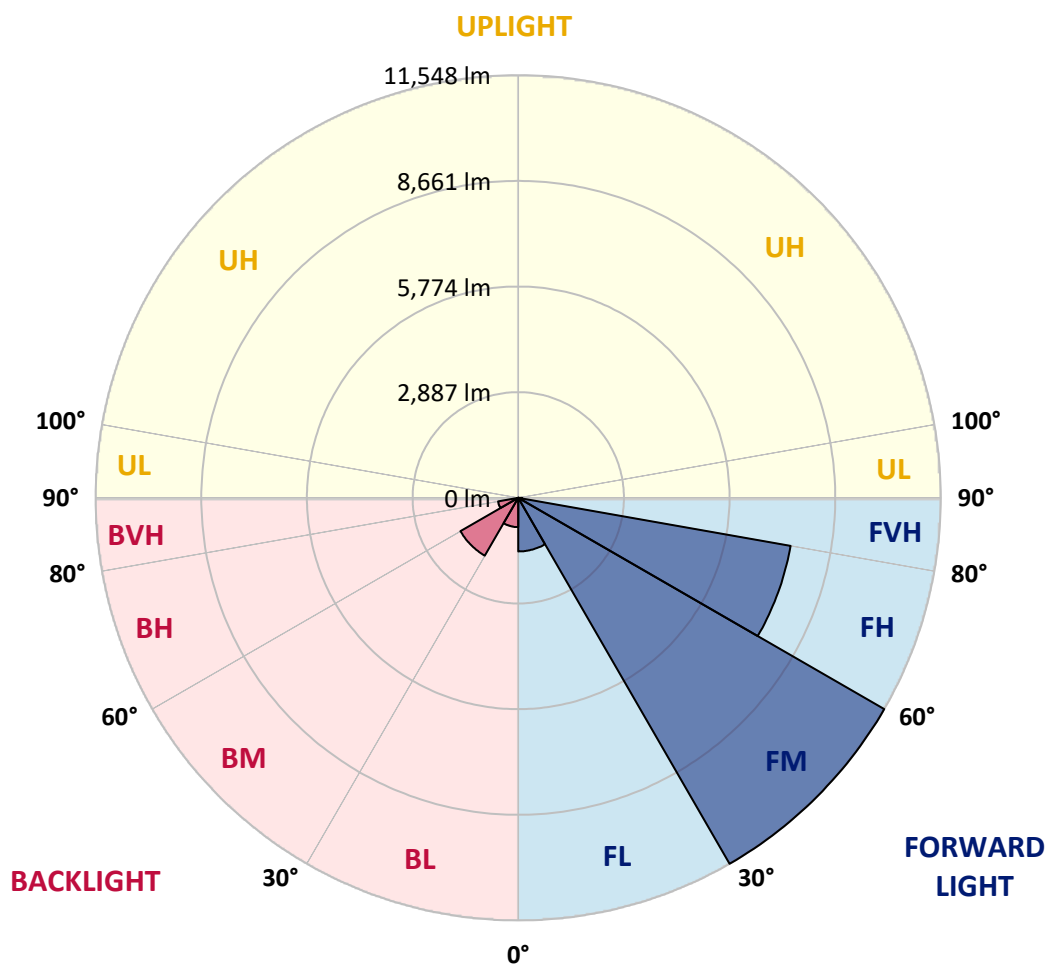
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1465.8	6.1			
FM	(30°-60°)	11547.9	48.4			
FH	(60°-80°)	7556.4	31.7			G4/12000
FVH	(80°-90°)	107.0	0.4			G2/225
BL	(0°-30°)	801.4	3.4	B2/1000		
BM	(30°-60°)	1824.9	7.6	B2/2500		
BH	(60°-80°)	560.2	2.3	B2/1000		G2/1000
BVH	(80°-90°)	5.5	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°	2776.2	2776.2	2776.2	2776.2	2776.2	2776.2	2776.2	2776.2	2776.2	2776.2	2776.2
2.5°	2766.7	2785.8	2781.0	2776.2	2774.7	2777.9	2779.4	2777.9	2777.9	2777.9	2779.4
5°	2713.8	2729.8	2729.8	2741.1	2757.0	2776.2	2790.7	2793.8	2797.0	2801.8	2800.2
7.5°	2613.0	2625.8	2635.4	2672.2	2712.3	2763.4	2806.7	2829.0	2832.3	2849.8	2856.3
10°	2544.3	2560.2	2576.2	2614.6	2672.2	2749.0	2822.6	2877.1	2885.1	2926.7	2945.8
12.5°	2541.0	2557.0	2577.8	2619.4	2686.6	2768.2	2857.8	2936.2	2950.7	3011.4	3051.4
15°	2574.6	2593.9	2613.0	2664.2	2736.2	2835.5	2931.4	3029.1	3043.4	3129.8	3173.1
17.5°	2643.4	2669.0	2683.4	2734.6	2811.5	2921.9	3048.2	3160.3	3173.1	3273.8	3328.3
20°	2779.4	2809.8	2814.6	2856.3	2931.4	3049.9	3200.3	3339.4	3355.4	3470.6	3531.5
22.5°	3061.1	3104.2	3065.9	3086.7	3153.8	3272.3	3435.5	3611.5	3633.9	3765.1	3819.6
25°	3557.1	3617.9	3518.7	3483.5	3512.3	3635.5	3840.4	4062.7	4088.3	4194.0	4221.2
27.5°	4531.6	4453.2	4302.7	4155.6	4069.1	4139.6	4370.0	4645.2	4677.2	4779.6	4747.6
30°	5602.0	5533.3	5330.0	5003.6	4798.8	4787.6	5000.5	5307.7	5344.5	5442.0	5344.5
32.5°	6674.2	6608.6	6387.7	5986.1	5630.8	5454.8	5602.0	5942.8	5962.1	6024.5	5880.5
35°	7728.6	7661.5	7440.6	7029.3	6592.6	6192.5	6163.7	6547.7	6554.2	6619.8	6405.3
37.5°	8789.6	8733.5	8498.3	8095.0	7664.6	7112.6	6845.4	7120.6	7128.6	7192.6	6970.2
40°	9546.4	9570.4	9408.8	9096.8	8727.2	8123.8	7610.2	7730.2	7682.3	7789.5	7656.6
42.5°	10196.1	10244.1	10103.2	9946.4	9732.1	9200.8	8557.5	8536.7	8459.9	8517.5	8379.9
45°	10757.7	10797.7	10671.3	10634.5	10629.7	10256.9	9592.8	9468.0	9360.8	9349.5	9184.8
47.5°	10964.1	11040.9	11095.3	11218.5	11458.6	11301.8	10663.3	10469.7	10349.6	10261.7	10000.8
50°	11042.5	11124.1	11309.7	11668.2	12236.2	12303.4	11729.0	11511.4	11364.2	11204.2	10820.1
52.5°	10937.0	11082.5	11332.2	11935.4	12759.5	13106.7	12751.5	12561.1	12393.1	12132.2	11562.6
55°	10314.5	10460.1	10970.5	11932.2	13020.3	13669.9	13718.0	13633.1	13444.3	13033.1	12162.6
57.5°	9002.4	9218.3	10026.4	11525.8	13015.4	14154.7	14665.2	14726.1	14514.8	13926.0	12634.7
60°	7184.6	7477.5	8463.1	10624.8	12613.9	14417.2	15495.7	15799.8	15575.7	14806.0	13017.1
62.5°	5013.2	5352.4	6285.3	9213.6	11695.4	14228.4	16102.1	16663.8	16494.2	15593.3	13164.3
65°	3057.9	3166.6	3918.8	7250.2	10133.7	13438.0	16289.4	17131.0	17075.1	16075.0	12946.7
67.5°	2037.0	2128.2	2344.2	4971.7	7866.3	11858.6	15841.4	17049.4	17065.4	15996.6	12149.8
70°	1227.3	1305.7	1446.5	2891.4	5098.0	9386.4	14454.0	16009.4	16102.1	14948.5	10639.3
72.5°	505.6	558.4	686.4	1310.5	2640.2	5957.3	11509.7	13745.1	13961.2	12569.1	8165.5
75°	286.4	313.6	403.2	657.6	1145.7	2776.2	6971.7	9757.6	10076.1	8663.1	4912.4
77.5°	190.4	203.3	260.9	425.7	644.8	947.3	2979.5	5083.6	5691.7	4731.6	2126.6
80°	128.0	139.2	179.2	284.8	419.2	406.4	948.8	1883.3	2317.0	1625.8	518.4
82.5°	86.4	88.0	128.0	187.2	265.6	196.8	280.0	585.7	736.1	470.5	196.8
85°	49.6	48.0	94.4	108.9	118.4	81.6	84.8	176.0	230.4	198.4	112.0
87.5°	6.4	9.6	36.8	28.8	16.0	17.6	17.6	30.4	44.8	48.0	24.0
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°	2776.2	2776.2	2776.2	2776.2	2776.2	2776.2	2776.2	2776.2	2776.2	2776.2	2776.2
2.5°	2779.4	2777.9	2773.0	2768.2	2757.0	2750.6	2753.9	2750.6	2749.0	2750.6	2757.0
5°	2800.2	2795.5	2782.7	2766.7	2744.2	2717.1	2699.4	2673.8	2649.8	2635.4	2638.7
7.5°	2856.3	2851.4	2833.8	2789.0	2717.1	2603.4	2499.4	2408.2	2339.4	2299.4	2301.0
10°	2945.8	2937.9	2910.7	2811.5	2622.7	2374.6	2168.2	1997.0	1885.0	1832.2	1827.4
12.5°	3051.4	3041.9	2993.8	2790.7	2443.4	2056.1	1771.3	1581.0	1476.9	1430.5	1425.7
15°	3176.3	3163.5	3069.1	2691.4	2182.5	1704.2	1443.3	1300.9	1233.7	1192.1	1193.7
17.5°	3331.5	3309.1	3125.0	2542.6	1899.3	1435.3	1241.7	1134.5	1075.3	1035.2	1032.1
20°	3533.1	3496.3	3169.9	2365.0	1638.6	1265.7	1105.7	1016.1	971.3	936.0	929.7
22.5°	3814.7	3762.0	3224.2	2173.0	1454.5	1148.9	1004.9	939.3	902.5	862.4	856.1
25°	4163.5	4101.1	3291.5	1995.4	1328.1	1048.1	931.3	876.9	833.6	787.3	782.5
27.5°	4651.6	4539.6	3371.5	1849.7	1219.3	961.7	864.1	803.3	753.7	715.2	707.2
30°	5195.6	5011.6	3441.8	1761.8	1120.1	881.7	776.0	715.2	668.8	641.6	636.8
32.5°	5710.9	5461.3	3488.3	1723.3	1030.5	790.5	680.1	614.5	579.2	571.2	576.0
35°	6197.4	5867.7	3483.5	1686.5	950.5	699.3	585.7	518.4	491.3	496.0	496.0
37.5°	6757.4	6301.3	3449.8	1628.9	884.9	616.0	504.0	444.8	420.9	422.4	428.9
40°	7408.6	6802.2	3429.1	1520.2	812.8	539.3	436.9	388.8	371.3	364.8	363.3
42.5°	8103.0	7287.0	3432.3	1396.9	723.2	470.5	390.4	350.4	334.5	329.6	328.0
45°	8800.8	7749.4	3437.1	1268.9	628.8	417.6	356.8	323.2	313.6	307.2	307.2
47.5°	9456.8	8143.1	3347.4	1131.3	536.1	377.6	329.6	307.2	299.2	291.2	291.2
50°	10068.1	8405.5	3131.5	971.3	462.5	345.6	308.8	292.8	284.8	276.9	276.9
52.5°	10543.3	8447.1	2774.7	806.5	411.2	321.6	296.0	281.7	272.0	264.0	262.4
55°	10754.5	8186.3	2267.4	652.8	371.3	300.8	283.2	268.9	257.6	249.6	248.0
57.5°	10700.1	7637.5	1768.1	524.8	332.8	280.0	267.2	257.6	244.8	232.1	230.4
60°	10432.9	6903.0	1332.9	436.9	297.7	257.6	249.6	241.6	224.1	204.8	201.6
62.5°	9970.5	5979.7	950.5	361.6	259.2	232.1	228.8	222.4	196.8	161.6	158.4
65°	9263.1	4858.0	640.0	300.8	222.4	203.3	204.8	193.6	160.0	120.0	116.8
67.5°	8229.5	3552.3	409.6	246.4	185.6	169.6	171.2	164.8	136.0	102.4	97.6
70°	6912.6	2352.2	267.2	187.2	148.8	131.2	140.8	142.4	115.2	83.2	80.1
72.5°	5067.6	1388.9	187.2	139.2	108.9	91.2	115.2	118.4	92.8	62.4	59.2
75°	2888.2	659.3	140.8	100.8	67.2	64.0	89.6	89.6	64.0	41.6	38.4
77.5°	1212.9	275.2	99.2	65.6	38.4	36.8	60.8	56.0	32.0	19.2	19.2
80°	350.4	123.2	52.8	32.0	16.0	14.3	24.0	17.6	8.0	3.2	3.2
82.5°	137.7	54.4	20.8	12.8	6.4	6.4	3.2	0.0	0.0	0.0	0.0
85°	81.6	22.4	9.6	4.8	1.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	20.8	4.8	3.2	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)