

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: P970491

Luminaire Tested: **NAV-SB6B-827-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P970491
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6B-827-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23260.3 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

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



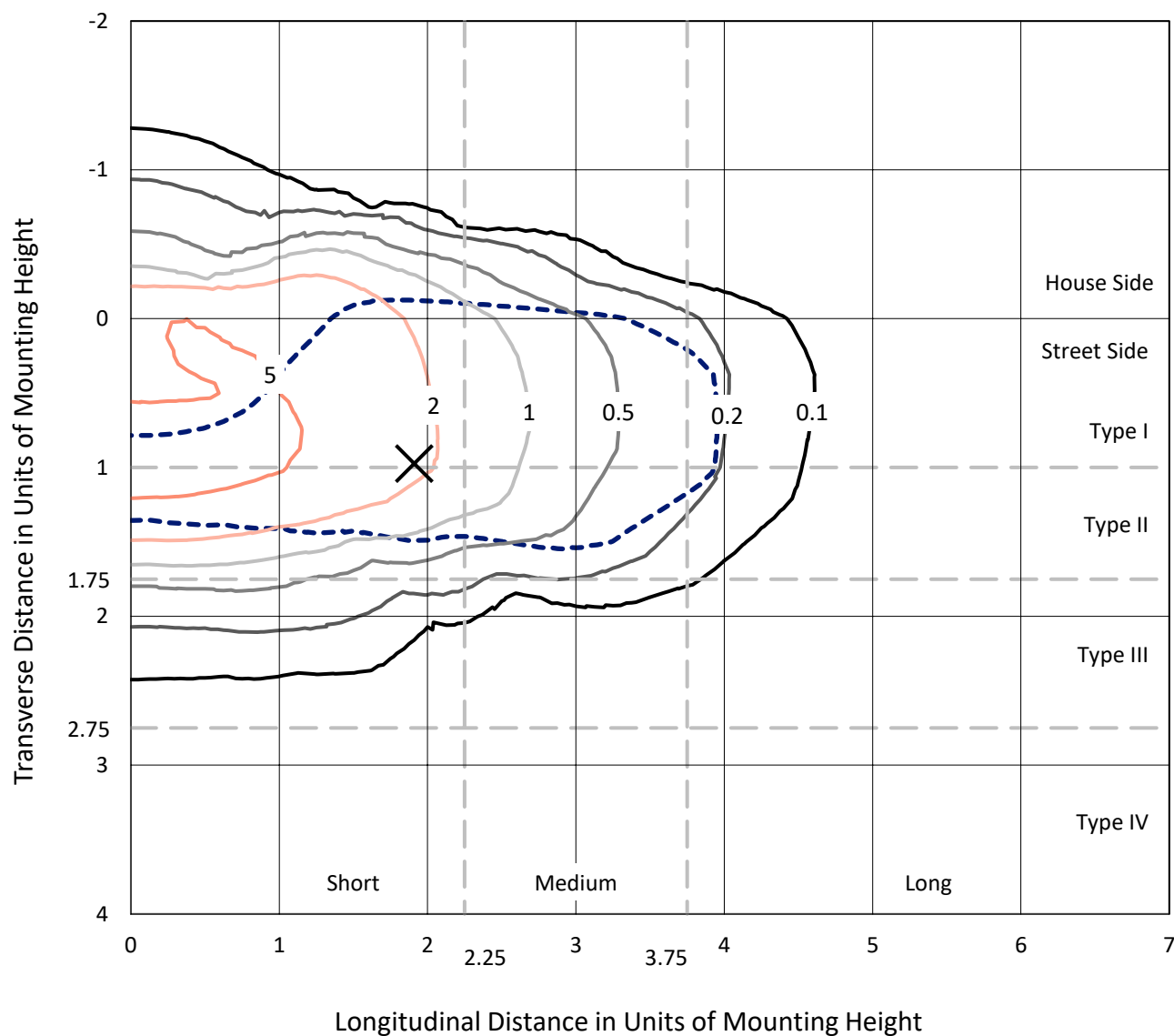
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

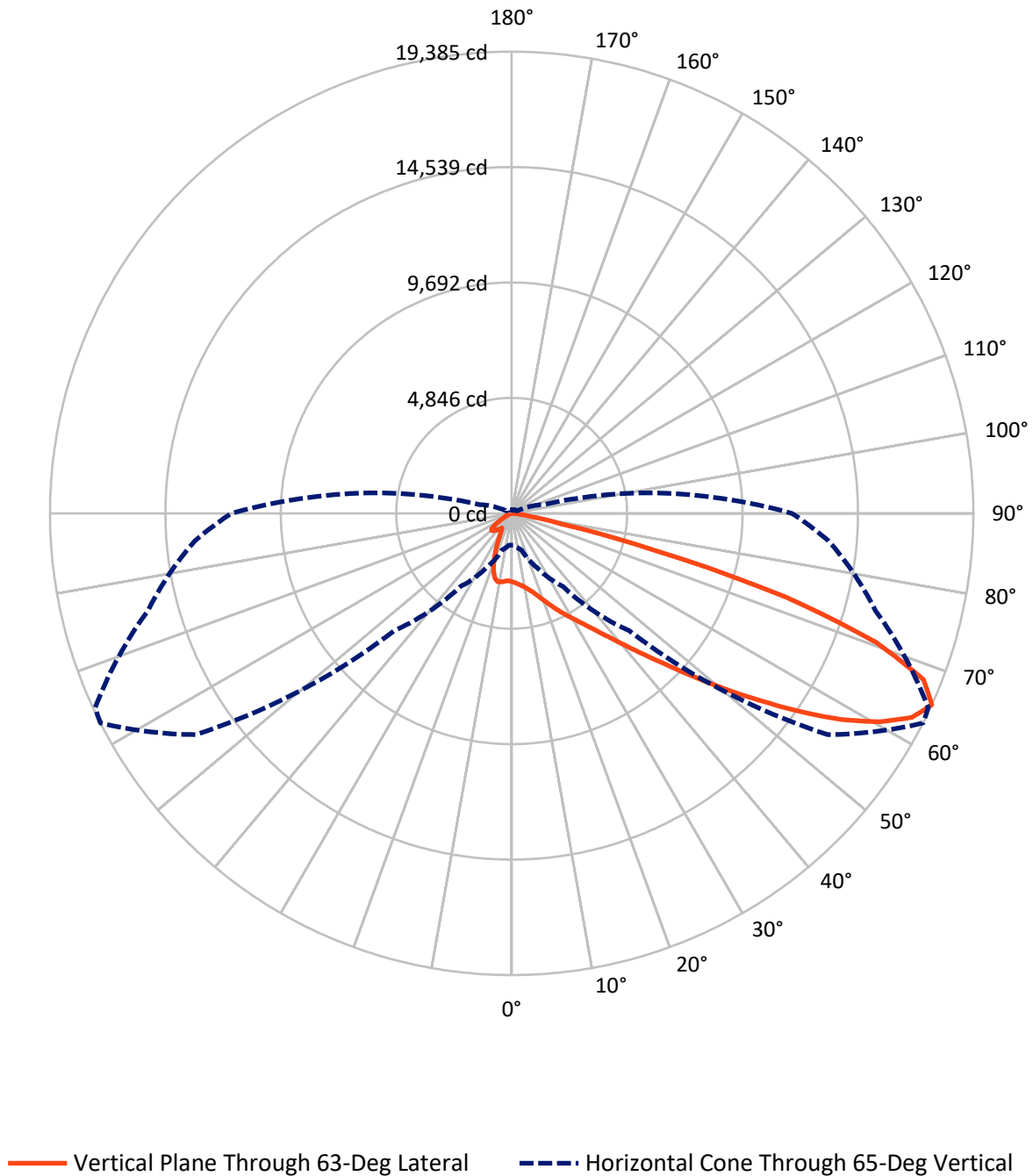


Based on 25 foot mounting height. Maximum calculated value = 7.9 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3419.1	0.0	3419.1
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	19841.3	0.0	19841.3
	% Fixture	85.3	0.0	85.3
Total	Lumens	23260.3	0.0	23260.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.5	1.2
10°-20°	750.5	3.2
20°-30°	1306.8	5.6
30°-40°	2355.3	10.1
40°-50°	4671.4	20.1
50°-60°	6363.2	27.4
60°-70°	5079.1	21.8
70°-80°	2298.4	9.9
80°-90°	165.2	0.7
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°	23260.3	100.0
0°-180°	23260.3	100.0

Coefficient of Utilization



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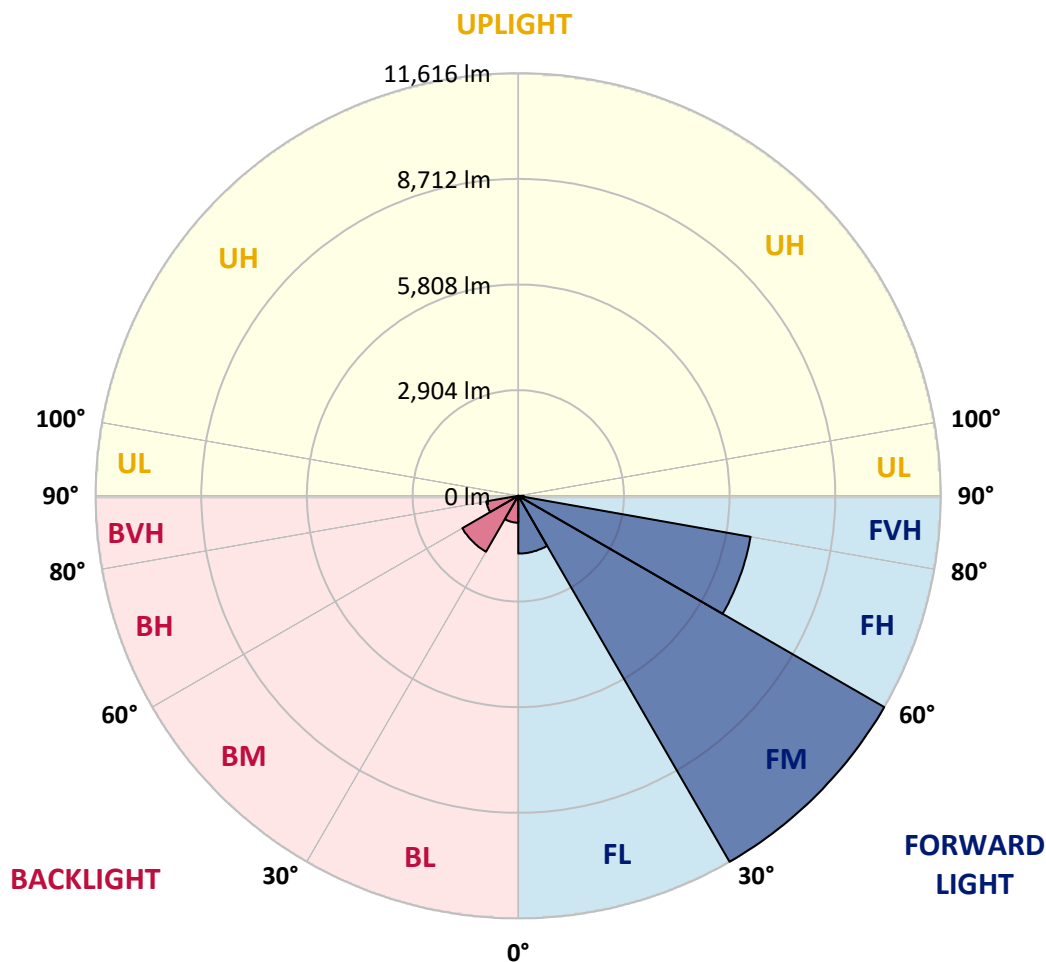
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1587.8	6.8			
FM	(30°-60°)	11615.6	49.9			
FH	(60°-80°)	6484.9	27.9			G3/7500
FVH	(80°-90°)	153.0	0.7			G2/225
BL	(0°-30°)	739.9	3.2	B2/1000		
BM	(30°-60°)	1774.3	7.6	B2/2500		
BH	(60°-80°)	892.6	3.8	B2/1000		G2/1000
BVH	(80°-90°)	12.3	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2870.7	2870.7	2870.7	2870.7	2870.7	2870.7	2870.7	2870.7	2870.7	2870.7	2870.7
2.5°	2938.0	2930.0	2941.1	2936.4	2933.1	2926.8	2923.6	2920.3	2914.0	2909.2	2890.0
5°	2946.0	2941.1	2952.4	2961.9	2971.6	2981.2	2985.9	2992.4	2985.9	2973.2	2953.9
7.5°	2878.8	2875.5	2899.5	2928.3	2971.6	3008.4	3048.4	3070.8	3072.4	3067.6	3046.8
10°	2874.0	2866.0	2890.0	2925.1	2981.2	3046.8	3117.2	3165.2	3171.6	3192.4	3170.0
12.5°	2949.1	2941.1	2974.8	3013.2	3070.8	3139.6	3226.0	3293.2	3302.9	3331.7	3315.7
15°	3075.6	3064.3	3102.8	3152.4	3226.0	3304.4	3395.6	3456.4	3464.4	3499.7	3470.9
17.5°	3222.8	3211.6	3256.4	3309.2	3389.3	3496.5	3602.1	3669.3	3678.8	3701.3	3648.5
20°	3411.6	3397.3	3432.4	3480.5	3565.3	3693.3	3819.7	3915.7	3914.1	3914.1	3827.7
22.5°	3630.9	3608.4	3638.9	3677.3	3757.2	3912.5	4080.5	4194.1	4194.1	4149.3	4006.9
25°	3866.1	3843.6	3877.3	3912.5	3982.9	4158.9	4355.7	4496.6	4502.9	4426.2	4198.9
27.5°	4160.6	4131.7	4157.3	4198.9	4240.5	4419.8	4653.4	4816.6	4819.9	4701.4	4381.4
30°	4727.0	4645.4	4565.3	4520.6	4539.7	4717.4	4967.0	5147.9	5163.8	5000.7	4579.8
32.5°	5763.9	5747.9	5466.3	5098.2	4906.3	5037.5	5317.5	5535.1	5544.7	5335.1	4837.4
35°	7375.3	7356.1	6903.3	6202.4	5576.7	5466.3	5743.2	6000.8	5994.4	5757.5	5171.8
37.5°	9298.8	9281.2	8684.3	7746.5	6733.6	6114.3	6292.0	6562.5	6602.4	6292.0	5603.9
40°	10942.2	10876.6	10499.0	9594.8	8269.8	7189.8	7072.9	7252.1	7293.7	6925.7	6152.8
42.5°	12187.1	12131.2	11939.1	11374.2	10129.3	8780.4	7993.1	8061.8	8108.3	7666.6	6783.2
45°	12832.0	12819.3	12896.0	12843.2	12024.0	10732.6	9308.3	9021.9	9039.6	8487.5	7498.6
47.5°	12923.2	12916.8	13267.3	13763.4	13652.9	12934.5	10996.6	10218.9	10156.5	9414.0	8276.3
50°	12385.6	12372.8	13044.9	13974.5	14741.0	14784.3	12913.7	11567.8	11430.3	10372.5	9087.5
52.5°	10668.5	10665.3	11769.5	13316.9	15123.5	16403.7	14808.3	13049.7	12819.3	11387.0	9945.3
55°	8209.0	8268.3	9534.0	11363.0	14425.8	17183.0	16509.3	14694.7	14341.0	12407.9	10735.7
57.5°	5815.1	5901.5	7152.9	8781.9	12262.4	16722.2	17659.8	16342.9	15962.0	13425.7	11537.5
60°	3123.6	3200.4	4453.3	6397.6	9122.7	15003.5	18266.3	17773.5	17413.4	14392.2	12260.7
62.5°	1861.0	1886.6	2405.1	4130.1	6170.4	11462.3	18008.6	18863.2	18567.2	15203.5	12889.7
65°	1336.2	1341.0	1601.8	2521.9	3746.1	6964.1	16202.1	19384.9	19293.7	15814.8	13355.3
67.5°	1124.9	1121.8	1230.5	1675.4	2552.4	3488.5	12417.6	18647.2	19034.5	16202.1	13619.3
70°	964.9	969.8	1097.8	1227.3	1918.6	1974.7	6173.6	16235.7	17061.3	16304.5	13603.3
72.5°	718.5	734.5	852.9	1118.6	1448.2	1358.5	2131.5	12038.3	13531.3	15362.0	12897.7
75°	507.3	515.3	600.0	941.0	1080.1	988.9	1088.1	6223.2	8137.1	11777.5	10556.6
77.5°	390.4	404.9	454.5	657.6	1064.2	694.4	665.6	2153.8	3309.2	7114.5	7237.7
80°	211.3	236.9	328.0	475.3	747.3	491.3	329.6	857.7	1121.8	3326.8	2790.8
82.5°	108.9	121.6	228.8	342.5	425.7	428.9	163.2	356.8	462.5	1027.4	382.4
85°	43.3	52.8	153.6	188.8	219.2	211.3	73.6	144.0	166.5	284.8	116.8
87.5°	9.6	16.0	56.0	43.3	41.6	44.8	17.6	33.6	32.0	33.6	20.8
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°	2870.7	2870.7	2870.7	2870.7	2870.7	2870.7	2870.7	2870.7	2870.7	2870.7	2870.7
2.5°	2888.3	2882.0	2864.4	2845.2	2822.7	2809.9	2801.9	2800.4	2789.1	2781.1	2789.1
5°	2936.4	2930.0	2896.3	2856.4	2813.1	2779.6	2747.5	2718.7	2677.1	2669.1	2665.9
7.5°	3032.4	3014.8	2960.4	2906.0	2824.4	2726.7	2608.3	2472.3	2350.7	2313.9	2296.3
10°	3150.8	3126.8	3058.0	2961.9	2781.1	2515.6	2229.1	1963.5	1752.2	1693.0	1670.6
12.5°	3285.2	3264.4	3173.2	2995.6	2600.3	2118.7	1680.2	1350.5	1145.7	1094.5	1080.1
15°	3445.2	3414.8	3288.4	2944.4	2277.0	1609.8	1153.7	958.5	884.9	875.4	865.7
17.5°	3614.9	3565.3	3390.8	2760.3	1841.8	1144.1	891.3	835.3	803.3	793.7	788.9
20°	3770.1	3706.1	3451.7	2481.9	1376.2	891.3	798.5	761.7	732.9	721.7	715.2
22.5°	3925.3	3834.1	3451.7	2102.7	1032.2	790.5	732.9	699.3	665.6	651.3	643.3
25°	4086.9	3965.3	3390.8	1680.2	830.5	724.9	670.5	633.7	604.9	587.3	580.9
27.5°	4243.7	4075.7	3251.6	1280.1	739.3	667.3	612.8	577.7	550.4	537.7	537.7
30°	4392.5	4184.6	3056.3	971.3	680.1	611.3	560.1	529.6	502.5	489.6	491.3
32.5°	4594.2	4322.1	2848.4	796.9	628.8	558.4	512.1	483.3	459.3	449.7	449.7
35°	4874.2	4525.4	2669.1	782.5	585.7	515.3	468.8	441.7	417.7	409.7	409.7
37.5°	5271.1	4853.4	2574.7	878.5	550.4	476.8	433.7	404.9	382.4	376.1	374.4
40°	5760.7	5298.2	2625.9	974.6	526.4	443.2	401.7	372.9	353.6	345.6	344.1
42.5°	6341.6	5847.1	2909.2	1048.2	510.4	414.4	371.3	339.3	326.5	323.3	323.3
45°	7008.8	6450.4	3342.8	1126.6	484.8	387.2	340.8	316.8	307.2	305.7	304.0
47.5°	7767.3	7112.9	3845.3	1224.2	459.3	361.6	316.8	300.8	292.8	289.7	289.7
50°	8519.5	7780.2	4362.2	1278.6	438.5	337.6	297.7	284.8	278.4	276.9	276.9
52.5°	9306.8	8466.7	4779.8	1227.3	420.9	318.5	281.7	272.0	265.7	264.0	264.0
55°	10057.3	9021.9	4851.8	1041.7	385.6	299.2	264.0	259.2	251.2	251.2	249.6
57.5°	10703.8	9300.3	4342.9	764.9	350.4	270.4	246.4	241.6	235.2	233.6	232.1
60°	11297.4	9220.4	3352.5	515.3	312.0	241.6	224.1	220.8	214.4	206.4	204.8
62.5°	11631.9	8868.3	2293.1	336.0	273.7	211.3	198.4	196.8	182.4	166.5	163.2
65°	11758.3	8145.1	1430.6	244.9	228.8	180.8	171.2	168.0	147.2	129.7	128.0
67.5°	11647.9	6954.5	721.7	193.6	180.8	150.5	140.8	140.8	126.4	110.4	108.9
70°	11206.2	5213.5	304.0	155.2	139.2	115.2	115.2	121.6	107.2	89.6	88.0
72.5°	10247.7	3507.7	161.6	118.4	104.0	81.6	94.4	99.2	84.8	67.2	67.2
75°	8146.6	2139.5	112.0	88.0	65.6	57.6	72.1	75.2	57.6	44.8	43.3
77.5°	5571.9	1229.0	75.2	56.0	41.6	33.6	49.6	46.4	30.4	20.8	22.4
80°	2446.7	512.1	43.3	25.6	16.0	12.8	17.6	12.8	9.6	6.4	6.4
82.5°	286.5	120.0	16.0	9.6	6.4	3.2	1.6	0.0	0.0	0.0	0.0
85°	59.2	14.5	8.0	3.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.2	3.2	1.6	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)