

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: P970522

Luminaire Tested: **NAV-SB6B-830-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P970522
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-830-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 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: 24035.2 lumens
Efficiency: N/A
Efficacy: 109.1 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

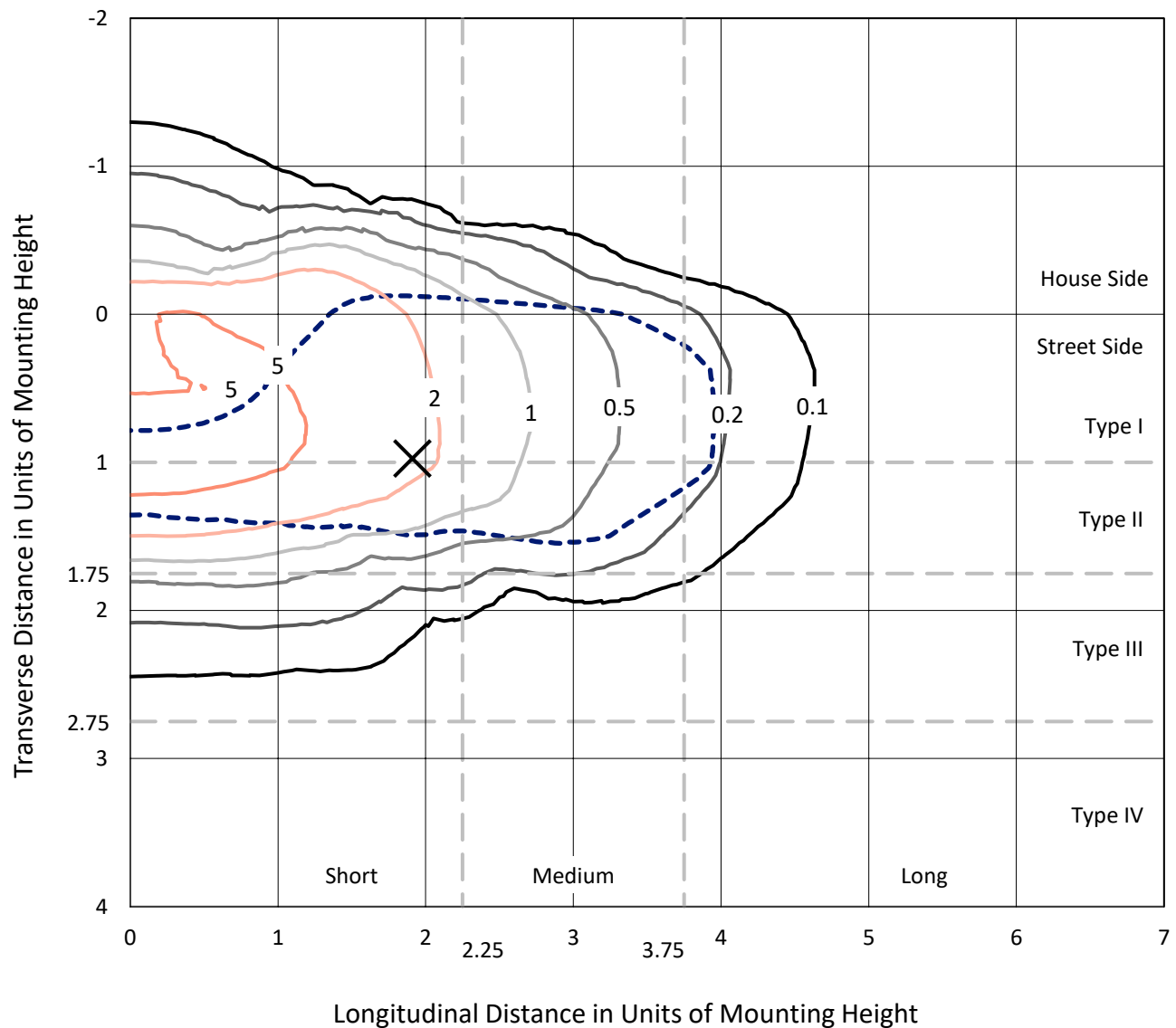


REPORT NUMBER: P970522

CATALOG NUMBER: NAV-SB6B-830-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

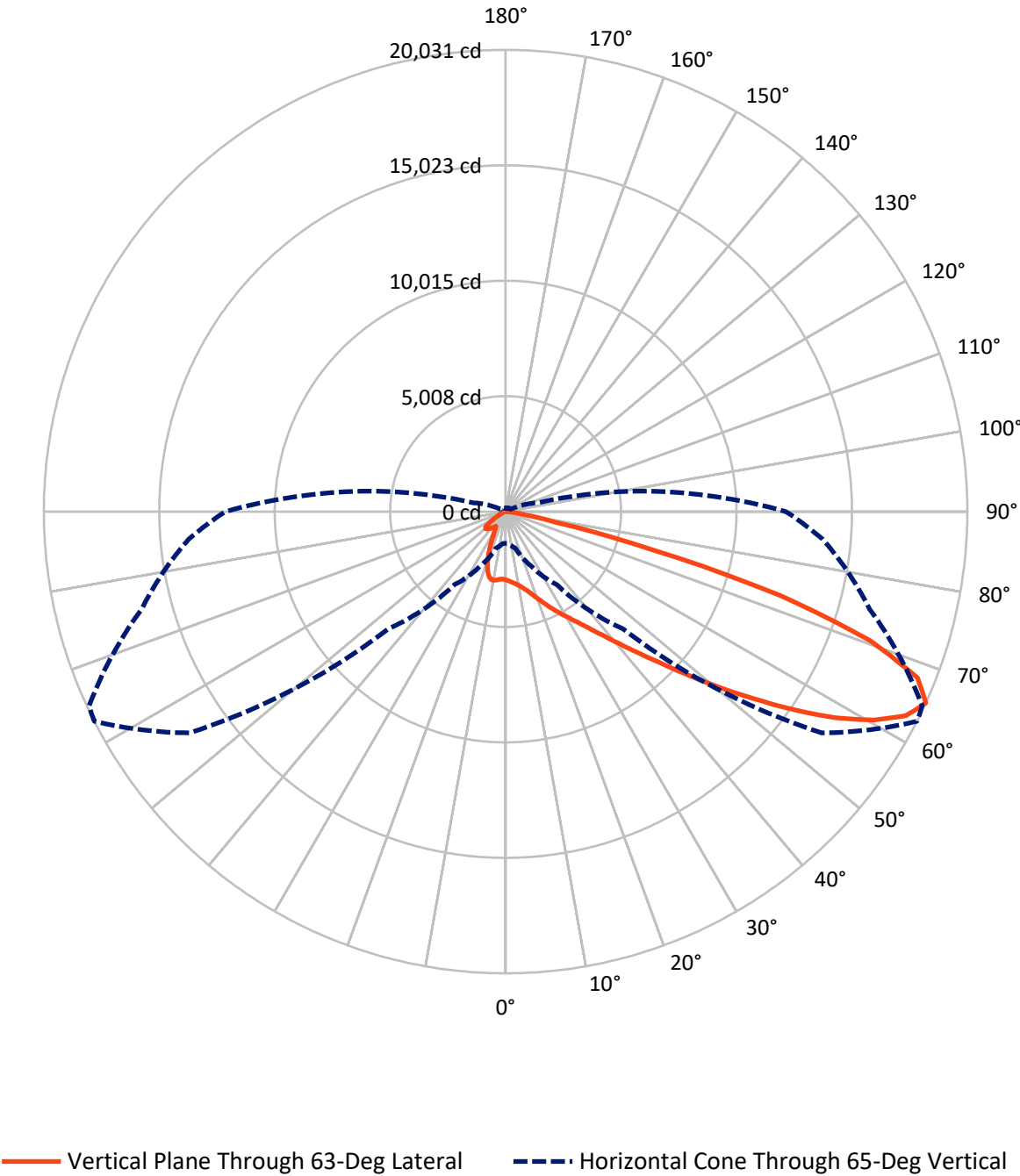
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc
Type II - Short - N/A

REPORT NUMBER: P970522
CATALOG NUMBER: NAV-SB6B-830-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P970522

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3533.0	0.0	3533.0
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	20502.2	0.0	20502.2
	% Fixture	85.3	0.0	85.3
Total	Lumens	24035.2	0.0	24035.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.5	1.2
10°-20°	775.5	3.2
20°-30°	1350.3	5.6
30°-40°	2433.8	10.1
40°-50°	4827.0	20.1
50°-60°	6575.2	27.4
60°-70°	5248.3	21.8
70°-80°	2375.0	9.9
80°-90°	170.7	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°	24035.2	100.0
0°-180°	24035.2	100.0

Coefficient of Utilization



REPORT NUMBER: P970522

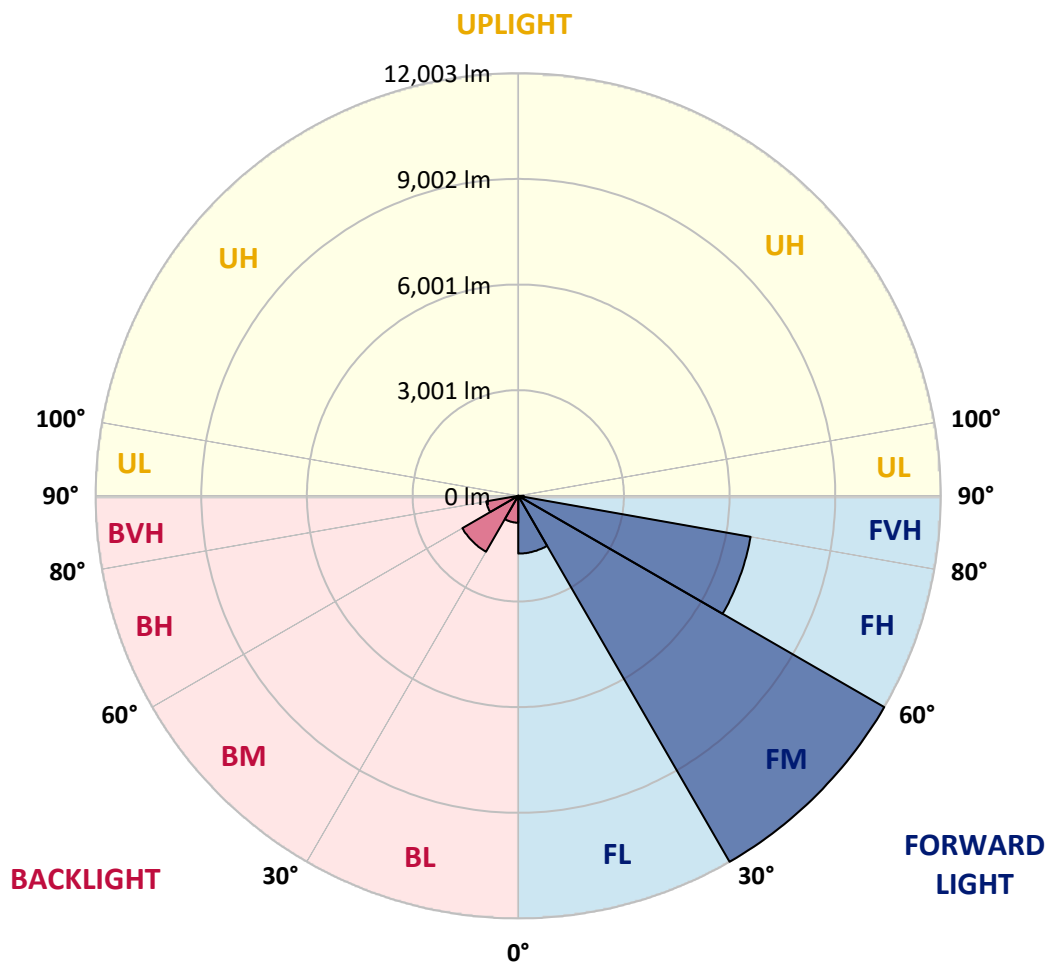
CATALOG NUMBER: NAV-SB6B-830-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1640.7	6.8			
FM	(30°-60°)	12002.6	49.9			
FH	(60°-80°)	6700.9	27.9			G3/7500
FVH	(80°-90°)	158.0	0.7			G2/225
BL	(0°-30°)	764.6	3.2	B2/1000		
BM	(30°-60°)	1833.4	7.6	B2/2500		
BH	(60°-80°)	922.3	3.8	B2/1000		G2/1000
BVH	(80°-90°)	12.7	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



REPORT NUMBER: P970522

CATALOG NUMBER: NAV-SB6B-830-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2966.4	2966.4	2966.4	2966.4	2966.4	2966.4	2966.4	2966.4	2966.4	2966.4	2966.4
2.5°	3035.8	3027.5	3039.1	3034.2	3030.9	3024.3	3021.0	3017.7	3011.0	3006.1	2986.2
5°	3044.1	3039.1	3050.7	3060.6	3070.6	3080.5	3085.5	3092.1	3085.5	3072.2	3052.3
7.5°	2974.7	2971.4	2996.2	3025.9	3070.6	3108.6	3149.9	3173.1	3174.7	3169.8	3148.3
10°	2969.7	2961.4	2986.2	3022.6	3080.5	3148.3	3221.1	3270.7	3277.2	3298.8	3275.6
12.5°	3047.4	3039.1	3073.9	3113.5	3173.1	3244.2	3333.5	3402.9	3412.8	3442.6	3426.1
15°	3178.0	3166.4	3206.2	3257.4	3333.5	3414.5	3508.8	3571.6	3579.8	3616.2	3586.5
17.5°	3330.1	3318.6	3364.9	3419.5	3502.1	3612.9	3722.1	3791.5	3801.4	3824.6	3770.1
20°	3525.3	3510.4	3546.8	3596.4	3684.1	3816.3	3947.0	4046.2	4044.4	4044.4	3955.2
22.5°	3751.8	3728.6	3760.1	3799.8	3882.5	4042.8	4216.4	4333.9	4333.9	4287.6	4140.4
25°	3994.8	3971.8	4006.4	4042.8	4115.6	4297.5	4500.9	4646.3	4653.0	4573.7	4338.8
27.5°	4299.2	4269.3	4295.8	4338.8	4381.8	4567.0	4808.4	4977.1	4980.4	4858.0	4527.3
30°	4884.4	4800.2	4717.5	4671.1	4691.0	4874.6	5132.5	5319.3	5335.8	5167.2	4732.3
32.5°	5956.0	5939.5	5648.4	5268.1	5069.6	5205.3	5494.6	5719.5	5729.4	5512.9	4998.6
35°	7621.1	7601.2	7133.3	6409.0	5762.4	5648.4	5934.4	6200.6	6194.1	5949.3	5344.1
37.5°	9608.6	9590.4	8973.6	8004.6	6958.0	6318.1	6501.6	6781.1	6822.4	6501.6	5790.6
40°	11306.7	11238.9	10848.7	9914.4	8545.3	7429.2	7308.6	7493.7	7536.7	7156.4	6357.8
42.5°	12593.2	12535.2	12336.9	11753.2	10466.7	9072.8	8259.2	8330.4	8378.3	7922.0	7009.3
45°	13259.5	13246.3	13325.6	13271.1	12424.5	11090.1	9618.5	9322.5	9340.7	8770.2	7748.4
47.5°	13353.8	13347.1	13709.3	14221.9	14107.8	13365.4	11362.9	10559.3	10494.9	9727.7	8552.0
50°	12798.2	12784.9	13479.5	14440.1	15232.1	15276.8	13343.9	11953.2	11811.1	10718.0	9390.3
52.5°	11024.0	11020.7	12161.6	13760.5	15627.4	16950.1	15301.6	13484.4	13246.3	11766.4	10276.5
55°	8482.5	8543.7	9851.6	11741.6	14906.4	17755.5	17059.3	15184.2	14818.7	12821.3	11093.4
57.5°	6008.9	6098.1	7391.2	9074.4	12670.8	17279.2	18248.2	16887.3	16493.8	13873.0	11921.8
60°	3227.6	3307.1	4601.7	6610.7	9426.7	15503.3	18874.9	18365.5	17993.6	14871.7	12669.2
62.5°	1923.0	1949.4	2485.2	4267.7	6375.9	11844.1	18608.7	19491.6	19185.7	15710.0	13319.1
65°	1380.7	1385.6	1655.2	2606.0	3870.9	7196.1	16741.8	20030.7	19936.4	16341.7	13800.2
67.5°	1162.5	1159.1	1271.5	1731.2	2637.3	3604.6	12831.3	19268.4	19668.5	16741.8	14073.0
70°	997.0	1002.0	1134.3	1268.2	1982.6	2040.5	6379.3	16776.6	17629.8	16847.6	14056.5
72.5°	742.4	759.0	881.3	1155.8	1496.4	1403.8	2202.5	12439.4	13982.1	15873.8	13327.4
75°	524.2	532.4	620.0	972.3	1116.1	1021.8	1124.4	6430.5	8408.1	12169.8	10908.3
77.5°	403.4	418.3	469.6	679.6	1099.6	717.6	687.9	2225.6	3419.5	7351.5	7478.8
80°	218.2	244.8	339.0	491.1	772.2	507.6	340.6	886.3	1159.1	3437.6	2883.7
82.5°	112.4	125.7	236.5	353.8	439.8	443.1	168.6	368.7	477.9	1061.6	395.2
85°	44.7	54.5	158.8	195.2	226.5	218.2	76.1	148.8	172.0	294.3	120.7
87.5°	9.9	16.5	57.9	44.7	42.9	46.3	18.1	34.7	33.1	34.7	21.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P970522

CATALOG NUMBER: NAV-SB6B-830-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2966.4	2966.4	2966.4	2966.4	2966.4	2966.4	2966.4	2966.4	2966.4	2966.4	2966.4
2.5°	2984.6	2977.9	2959.8	2939.9	2916.8	2903.5	2895.3	2893.7	2882.1	2873.8	2882.1
5°	3034.2	3027.5	2992.9	2951.5	2906.9	2872.2	2839.0	2809.3	2766.4	2758.1	2754.8
7.5°	3133.4	3115.2	3059.0	3002.7	2918.5	2817.6	2695.2	2554.7	2429.0	2391.0	2372.8
10°	3255.8	3231.0	3159.9	3060.6	2873.8	2599.3	2303.4	2028.9	1810.6	1749.4	1726.3
12.5°	3394.7	3373.2	3278.9	3095.4	2686.9	2189.3	1736.1	1395.5	1183.9	1131.0	1116.1
15°	3560.0	3528.6	3398.0	3042.5	2353.0	1663.5	1192.2	990.5	914.4	904.5	894.5
17.5°	3735.3	3684.1	3503.8	2852.3	1903.2	1182.2	921.0	863.2	830.0	820.1	815.2
20°	3895.7	3829.5	3566.6	2564.5	1422.0	921.0	825.1	787.1	757.3	745.7	739.1
22.5°	4056.0	3961.8	3566.6	2172.7	1066.5	816.8	757.3	722.6	687.9	673.0	664.7
25°	4223.1	4097.4	3503.8	1736.1	858.1	749.1	692.8	654.8	625.0	606.8	600.2
27.5°	4385.2	4211.5	3360.0	1322.8	763.9	689.5	633.2	597.0	568.8	555.6	555.6
30°	4538.9	4324.0	3158.2	1003.7	702.7	631.6	578.7	547.3	519.2	505.9	507.6
32.5°	4747.2	4466.1	2943.3	823.5	649.8	577.1	529.1	499.4	474.6	464.6	464.6
35°	5036.6	4676.2	2758.1	808.5	605.2	532.4	484.5	456.3	431.5	423.3	423.3
37.5°	5446.6	5015.1	2660.5	907.7	568.8	492.7	448.1	418.3	395.2	388.6	386.9
40°	5952.7	5474.7	2713.4	1007.0	544.0	458.1	415.0	385.3	365.4	357.1	355.5
42.5°	6552.8	6042.0	3006.1	1083.0	527.5	428.2	383.7	350.5	337.3	334.0	334.0
45°	7242.3	6665.3	3454.1	1164.1	501.0	400.2	352.2	327.4	317.4	315.8	314.2
47.5°	8026.2	7349.9	3973.4	1265.0	474.6	373.7	327.4	310.9	302.6	299.3	299.3
50°	8803.3	8039.4	4507.4	1321.1	453.0	348.9	307.6	294.3	287.7	286.1	286.1
52.5°	9616.9	8748.7	4939.1	1268.2	434.9	329.0	291.0	281.1	274.5	272.9	272.9
55°	10392.4	9322.5	5013.5	1076.5	398.5	309.2	272.9	267.8	259.6	259.6	258.0
57.5°	11060.4	9610.2	4487.7	790.4	362.1	279.4	254.6	249.7	243.0	241.4	239.7
60°	11673.8	9527.6	3464.1	532.4	322.5	249.7	231.4	228.2	221.6	213.3	211.7
62.5°	12019.4	9163.8	2369.5	347.3	282.8	218.2	205.0	203.4	188.5	172.0	168.6
65°	12150.0	8416.4	1478.3	253.0	236.5	186.9	176.9	173.6	152.1	134.0	132.3
67.5°	12036.0	7186.2	745.7	200.1	186.9	155.4	145.5	145.5	130.6	114.1	112.4
70°	11579.5	5387.1	314.2	160.4	143.8	119.0	119.0	125.7	110.8	92.6	90.9
72.5°	10589.1	3624.5	167.0	122.4	107.5	84.4	97.6	102.5	87.6	69.5	69.5
75°	8418.0	2210.7	115.7	90.9	67.8	59.6	74.4	77.7	59.6	46.3	44.7
77.5°	5757.5	1269.9	77.7	57.9	42.9	34.7	51.2	48.0	31.5	21.5	23.2
80°	2528.3	529.1	44.7	26.4	16.5	13.2	18.1	13.2	9.9	6.7	6.7
82.5°	296.0	124.0	16.5	9.9	6.7	3.3	1.6	0.0	0.0	0.0	0.0
85°	61.2	14.9	8.3	3.3	1.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.6	3.3	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)