

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: P965283

Luminaire Tested: **NAV-SB3D-835-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965283
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-SB3D-835-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 900mA 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: 22184.1 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

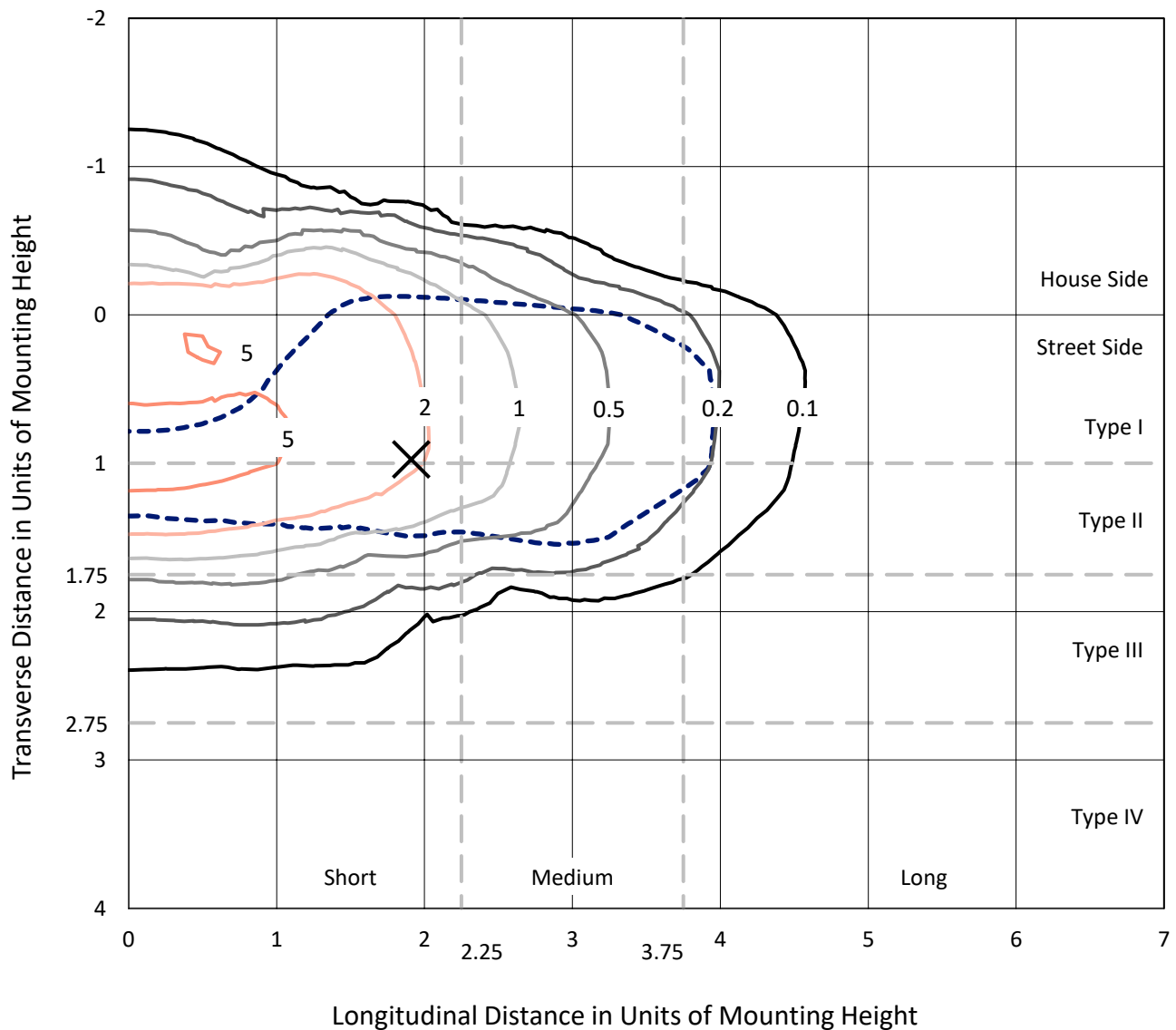
Input Watts (W): 218.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P965283
 CATALOG NUMBER: NAV-SB3D-835-U-T2U-HSS

Iso-Footcandle Lines of Horizontal Illumination

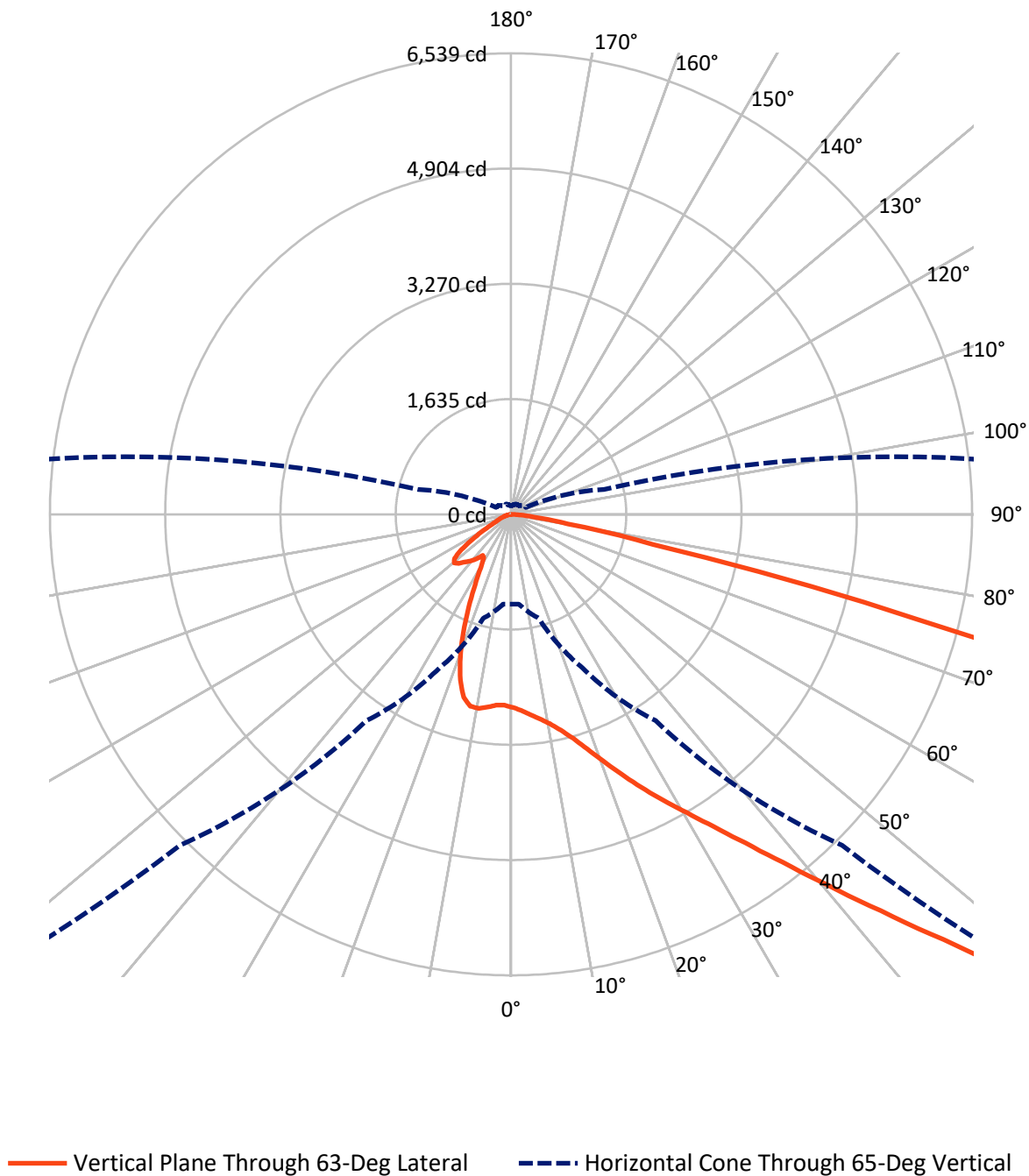
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
 Type II - Short - N/A

REPORT NUMBER: P965283
CATALOG NUMBER: NAV-SB3D-835-U-T2U-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P965283

CATALOG NUMBER: NAV-SB3D-835-U-T2U-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3260.9	0.0	3260.9
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	18923.2	0.0	18923.2
	% Fixture	85.3	0.0	85.3
Total	Lumens	22184.1	0.0	22184.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	258.0	1.2
10°-20°	715.8	3.2
20°-30°	1246.3	5.6
30°-40°	2246.4	10.1
40°-50°	4455.2	20.1
50°-60°	6068.8	27.4
60°-70°	4844.1	21.8
70°-80°	2192.1	9.9
80°-90°	157.6	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°	22184.1	100.0
0°-180°	22184.1	100.0

Coefficient of Utilization



REPORT NUMBER: P965283

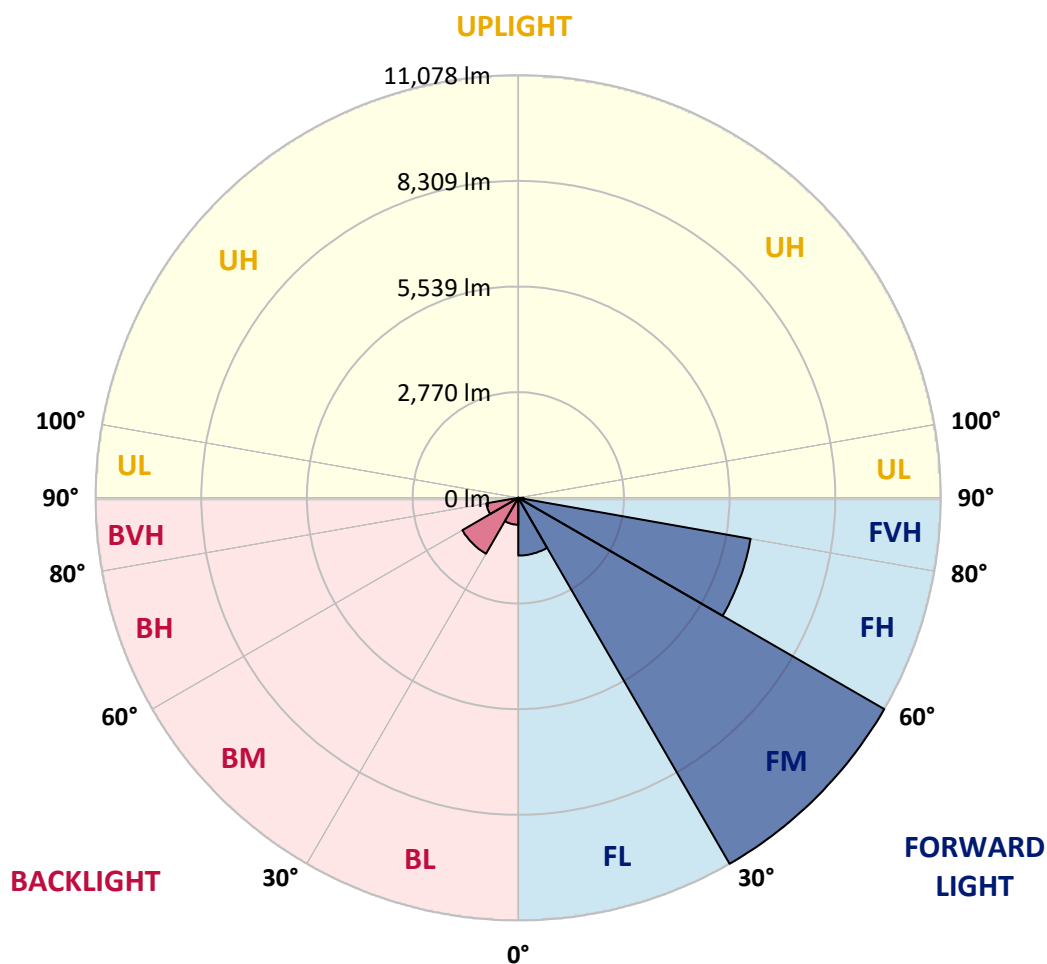
CATALOG NUMBER: NAV-SB3D-835-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1514.3	6.8			
FM	(30°-60°)	11078.2	49.9			
FH	(60°-80°)	6184.8	27.9			G3/7500
FVH	(80°-90°)	145.9	0.7			G2/225
BL	(0°-30°)	705.7	3.2	B2/1000		
BM	(30°-60°)	1692.2	7.6	B2/2500		
BH	(60°-80°)	851.3	3.8	B2/1000		G2/1000
BVH	(80°-90°)	11.7	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: P965283

CATALOG NUMBER: NAV-SB3D-835-U-T2U-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2738.0	2738.0	2738.0	2738.0	2738.0	2738.0	2738.0	2738.0	2738.0	2738.0	2738.0
2.5°	2802.0	2794.4	2805.1	2800.5	2797.4	2791.4	2788.3	2785.2	2779.2	2774.6	2756.2
5°	2809.6	2805.1	2815.8	2824.9	2834.1	2843.2	2847.9	2853.9	2847.9	2835.6	2817.3
7.5°	2745.6	2742.5	2765.4	2792.9	2834.1	2869.2	2907.3	2928.7	2930.3	2925.7	2905.8
10°	2741.0	2733.4	2756.2	2789.8	2843.2	2905.8	2973.0	3018.7	3024.9	3044.7	3023.3
12.5°	2812.7	2805.1	2837.1	2873.8	2928.7	2994.3	3076.7	3140.8	3150.0	3177.5	3162.2
15°	2933.2	2922.6	2959.3	3006.5	3076.7	3151.6	3238.5	3296.5	3304.2	3337.7	3310.2
17.5°	3073.7	3063.0	3105.7	3156.1	3232.4	3334.6	3435.4	3499.5	3508.7	3530.0	3479.7
20°	3253.8	3240.0	3273.6	3319.4	3400.3	3522.4	3643.0	3734.5	3732.9	3732.9	3650.5
22.5°	3462.9	3441.5	3470.4	3507.1	3583.4	3731.5	3891.7	4000.1	4000.1	3957.3	3821.5
25°	3687.2	3665.8	3697.9	3731.5	3798.6	3966.5	4154.2	4288.5	4294.6	4221.4	4004.7
27.5°	3968.0	3940.5	3965.0	4004.7	4044.3	4215.2	4438.0	4593.7	4596.8	4483.9	4178.6
30°	4508.3	4430.5	4354.1	4311.5	4329.7	4499.1	4737.2	4909.6	4924.9	4769.2	4367.8
32.5°	5497.3	5482.0	5213.4	4862.4	4679.2	4804.4	5071.4	5279.0	5288.2	5088.2	4613.6
35°	7034.1	7015.7	6583.9	5915.4	5318.6	5213.4	5477.4	5723.1	5717.0	5491.1	4932.5
37.5°	8868.5	8851.7	8282.5	7388.1	6422.1	5831.4	6000.9	6258.8	6297.0	6000.9	5344.7
40°	10435.9	10373.3	10013.1	9150.9	7887.2	6857.0	6745.6	6916.6	6956.3	6605.2	5868.1
42.5°	11623.3	11569.8	11386.7	10848.0	9660.6	8374.0	7623.1	7688.8	7733.0	7311.8	6469.4
45°	12238.3	12226.1	12299.4	12249.0	11467.6	10236.0	8877.7	8604.5	8621.3	8094.7	7151.6
47.5°	12325.3	12319.2	12653.4	13126.6	13021.2	12336.0	10487.8	9746.1	9686.6	8978.4	7893.3
50°	11812.5	11800.3	12441.2	13328.0	14059.0	14100.2	12316.1	11032.6	10901.4	9892.6	8667.1
52.5°	10175.0	10171.9	11224.9	12700.7	14423.8	15644.7	14123.1	12445.9	12226.1	10860.2	9485.1
55°	7829.3	7885.6	9092.9	10837.3	13758.4	16387.9	15745.4	14014.7	13677.5	11833.8	10239.0
57.5°	5546.1	5628.5	6822.0	8375.6	11694.9	15948.4	16842.7	15586.7	15223.5	12804.5	11003.6
60°	2979.1	3052.3	4247.3	6101.6	8700.6	14309.3	17421.1	16951.0	16607.7	13726.3	11693.4
62.5°	1774.9	1799.4	2293.8	3939.0	5884.8	10931.9	17175.4	17990.4	17708.0	14500.1	12293.2
65°	1274.4	1278.9	1527.7	2405.3	3572.7	6641.9	15452.4	18487.9	18400.9	15083.1	12737.4
67.5°	1072.9	1069.8	1173.6	1597.9	2434.3	3327.0	11843.1	17784.4	18153.7	15452.4	12989.2
70°	920.2	924.9	1046.9	1170.6	1829.8	1883.2	5887.9	15484.5	16272.0	15550.1	12973.9
72.5°	685.2	700.5	813.4	1066.8	1381.2	1295.7	2032.9	11481.3	12905.3	14651.1	12300.8
75°	483.8	491.4	572.4	897.4	1030.1	943.2	1037.8	5935.3	7760.6	11232.6	10068.1
77.5°	372.4	386.1	433.5	627.3	1014.9	662.4	634.9	2054.2	3156.1	6785.3	6902.9
80°	201.4	225.9	312.8	453.3	712.7	468.5	314.4	818.1	1069.8	3172.9	2661.6
82.5°	103.7	116.0	218.2	326.6	406.0	409.0	155.7	340.3	441.1	979.8	364.8
85°	41.2	50.3	146.5	180.1	209.1	201.4	70.2	137.4	158.7	271.6	111.4
87.5°	9.1	15.3	53.4	41.2	39.7	42.7	16.8	32.1	30.5	32.1	19.9
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: P965283

CATALOG NUMBER: NAV-SB3D-835-U-T2U-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2738.0	2738.0	2738.0	2738.0	2738.0	2738.0	2738.0	2738.0	2738.0	2738.0	2738.0
2.5°	2754.7	2748.6	2731.8	2713.5	2692.2	2680.0	2672.3	2670.7	2660.1	2652.5	2660.1
5°	2800.5	2794.4	2762.4	2724.2	2683.0	2651.0	2620.4	2592.9	2553.3	2545.6	2542.6
7.5°	2892.0	2875.3	2823.4	2771.5	2693.7	2600.6	2487.7	2357.9	2242.0	2206.8	2190.0
10°	3005.0	2982.1	2916.5	2824.9	2652.5	2399.1	2126.0	1872.6	1671.2	1614.7	1593.4
12.5°	3133.2	3113.3	3026.4	2857.0	2480.0	2020.7	1602.5	1288.1	1092.8	1043.9	1030.1
15°	3285.8	3256.8	3136.3	2808.1	2171.8	1535.3	1100.3	914.2	844.0	834.8	825.6
17.5°	3447.6	3400.3	3234.0	2632.6	1756.6	1091.2	850.0	796.6	766.1	757.0	752.3
20°	3595.6	3534.6	3291.9	2367.0	1312.5	850.0	761.6	726.4	698.9	688.3	682.2
22.5°	3743.7	3656.7	3291.9	2005.4	984.4	753.9	698.9	667.0	634.9	621.2	613.6
25°	3897.8	3781.8	3234.0	1602.5	792.1	691.4	639.5	604.3	576.9	560.1	554.0
27.5°	4047.4	3887.1	3101.1	1221.0	705.1	636.4	584.6	550.9	525.0	512.8	512.8
30°	4189.3	3990.9	2915.0	926.4	648.6	583.0	534.1	505.1	479.2	467.0	468.5
32.5°	4381.6	4122.1	2716.6	760.0	599.8	532.6	488.4	460.9	438.0	428.9	428.9
35°	4648.7	4316.0	2545.6	746.3	558.6	491.4	447.2	421.2	398.3	390.7	390.7
37.5°	5027.2	4628.8	2455.6	837.8	525.0	454.8	413.6	386.1	364.8	358.6	357.1
40°	5494.2	5053.1	2504.4	929.5	502.1	422.7	383.0	355.6	337.3	329.6	328.1
42.5°	6048.2	5576.6	2774.6	999.7	486.9	395.2	354.0	323.6	311.3	308.3	308.3
45°	6684.5	6151.9	3188.2	1074.4	462.4	369.3	325.0	302.2	293.0	291.5	290.0
47.5°	7408.0	6783.8	3667.3	1167.5	438.0	344.9	302.2	286.9	279.3	276.2	276.2
50°	8125.3	7420.2	4160.3	1219.4	418.2	322.1	283.8	271.6	265.6	264.0	264.0
52.5°	8876.2	8074.9	4558.7	1170.6	401.4	303.7	268.7	259.4	253.4	251.8	251.8
55°	9591.9	8604.5	4627.4	993.5	367.8	285.4	251.8	247.2	239.6	239.6	238.1
57.5°	10208.5	8870.0	4142.0	729.5	334.3	257.9	235.0	230.4	224.4	222.8	221.3
60°	10774.7	8793.8	3197.3	491.4	297.6	230.4	213.7	210.6	204.5	196.9	195.4
62.5°	11093.7	8458.0	2186.9	320.5	261.0	201.4	189.2	187.7	173.9	158.7	155.7
65°	11214.2	7768.2	1364.4	233.5	218.2	172.5	163.3	160.2	140.4	123.6	122.1
67.5°	11108.9	6632.7	688.3	184.7	172.5	143.5	134.3	134.3	120.5	105.3	103.7
70°	10687.7	4972.3	290.0	148.0	132.7	109.9	109.9	116.0	102.3	85.5	83.9
72.5°	9773.6	3345.4	154.2	113.0	99.2	77.8	90.0	94.6	80.9	64.1	64.1
75°	7769.7	2040.5	106.8	83.9	62.5	54.9	68.7	71.8	54.9	42.7	41.2
77.5°	5314.1	1172.1	71.8	53.4	39.7	32.1	47.4	44.3	29.0	19.9	21.3
80°	2333.5	488.4	41.2	24.4	15.3	12.2	16.8	12.2	9.1	6.1	6.1
82.5°	273.2	114.5	15.3	9.1	6.1	3.1	1.5	0.0	0.0	0.0	0.0
85°	56.5	13.7	7.6	3.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.7	3.1	1.5	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)