

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: P968197

Luminaire Tested: **NAV-SB5B-727-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968197
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-SB5B-727-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 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: 20668.1 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

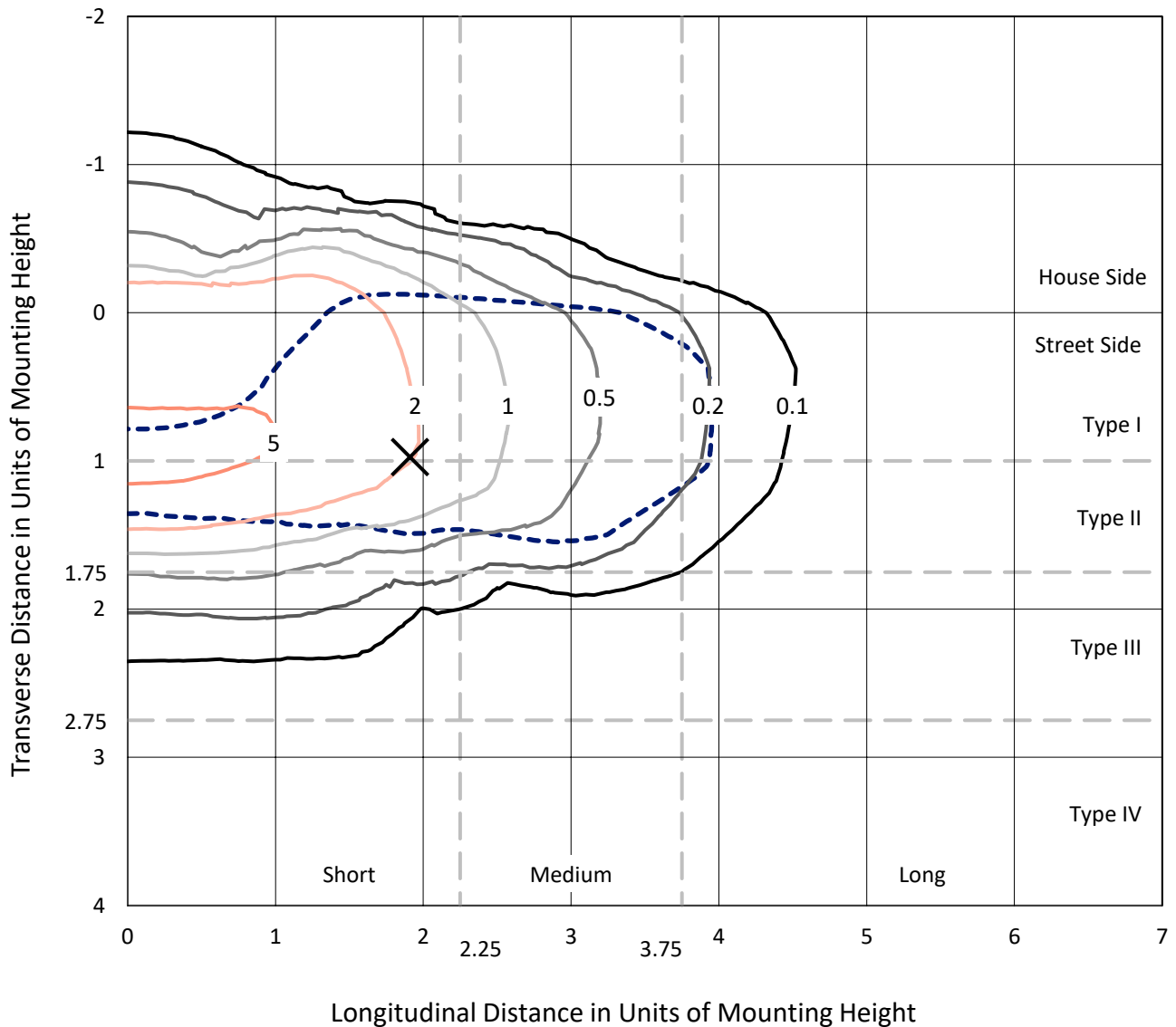
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

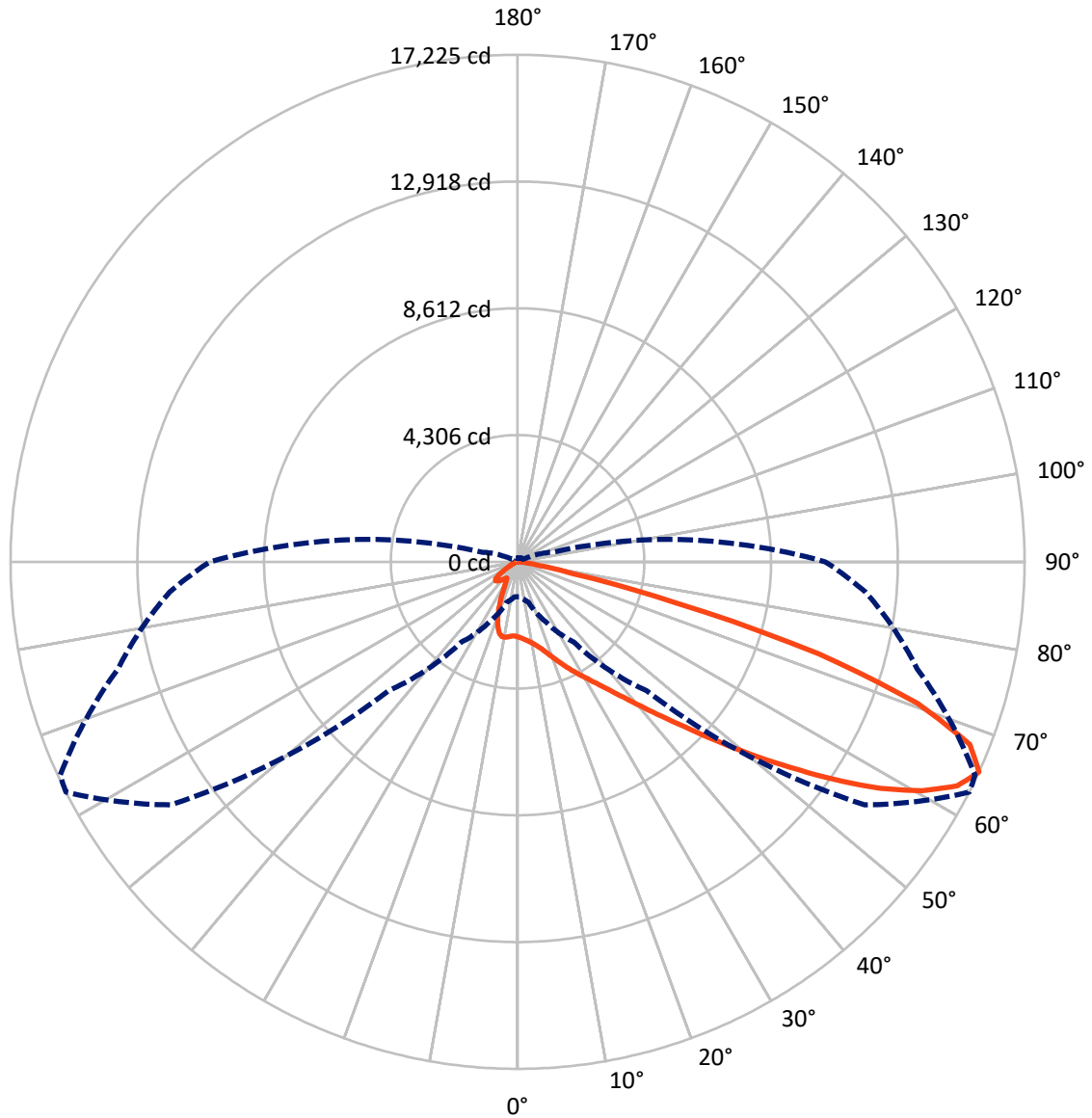
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3038.1	0.0	3038.1
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	17630.0	0.0	17630.0
	% Fixture	85.3	0.0	85.3
Total	Lumens	20668.1	0.0	20668.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.3	1.2
10°-20°	666.8	3.2
20°-30°	1161.1	5.6
30°-40°	2092.8	10.1
40°-50°	4150.8	20.1
50°-60°	5654.1	27.4
60°-70°	4513.0	21.8
70°-80°	2042.2	9.9
80°-90°	146.8	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°	20668.1	100.0
0°-180°	20668.1	100.0

Coefficient of Utilization



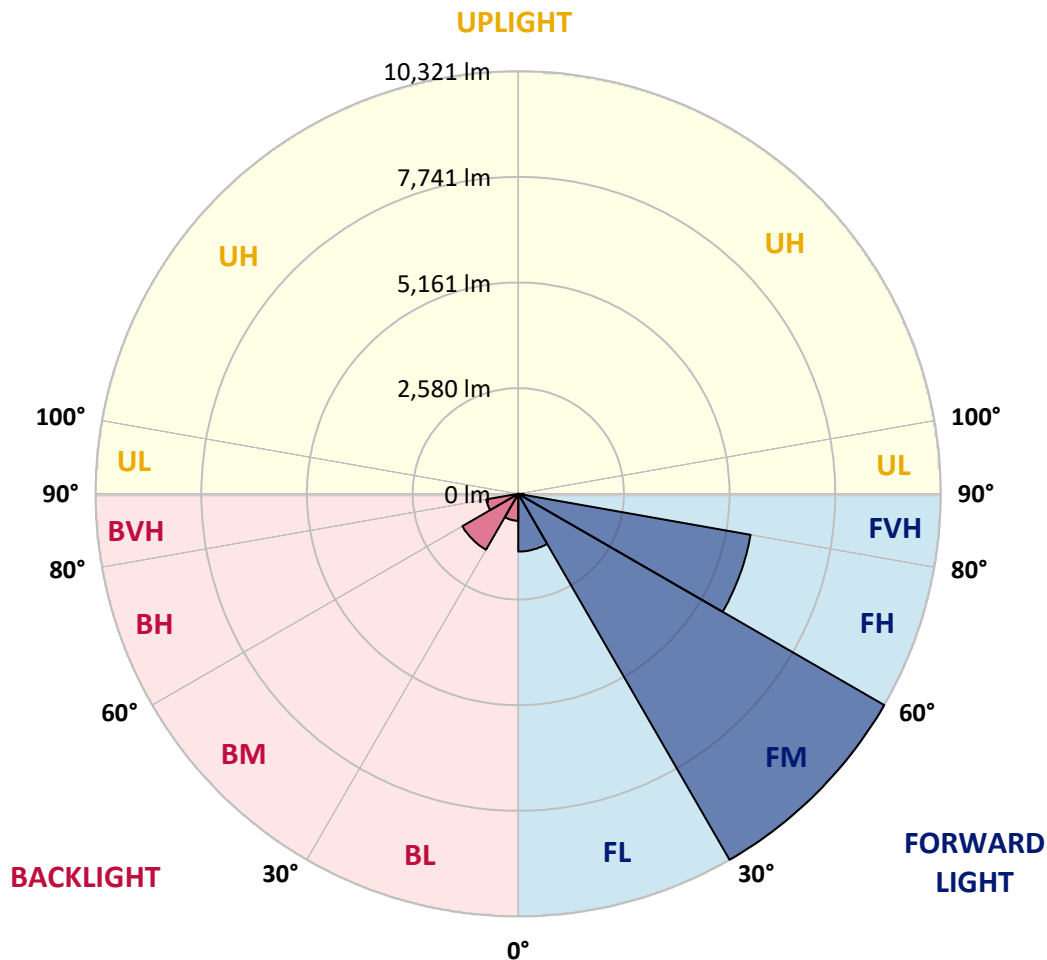
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1410.8	6.8			
FM (30°-60°)	10321.1	49.9			
FH (60°-80°)	5762.2	27.9			G3/7500
FVH (80°-90°)	135.9	0.7			G2/225
BL (0°-30°)	657.5	3.2	B2/1000		
BM (30°-60°)	1576.6	7.6	B2/2500		
BH (60°-80°)	793.1	3.8	B2/1000		G2/1000
BVH (80°-90°)	10.9	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°	2550.8	2550.8	2550.8	2550.8	2550.8	2550.8	2550.8	2550.8	2550.8	2550.8	2550.8
2.5°	2610.6	2603.4	2613.4	2609.1	2606.3	2600.6	2597.8	2594.9	2589.3	2584.9	2567.9
5°	2617.6	2613.4	2623.4	2631.9	2640.4	2648.9	2653.2	2658.8	2653.2	2641.8	2624.8
7.5°	2558.0	2555.1	2576.4	2602.1	2640.4	2673.1	2708.7	2728.5	2730.0	2725.7	2707.2
10°	2553.7	2546.6	2567.9	2599.2	2648.9	2707.2	2769.8	2812.5	2818.1	2836.6	2816.7
12.5°	2620.5	2613.4	2643.3	2677.4	2728.5	2789.7	2866.5	2926.2	2934.8	2960.3	2946.2
15°	2732.9	2722.9	2757.0	2801.1	2866.5	2936.1	3017.2	3071.2	3078.4	3109.6	3084.0
17.5°	2863.6	2853.7	2893.5	2940.4	3011.6	3106.8	3200.7	3260.3	3268.8	3288.8	3241.9
20°	3031.4	3018.6	3049.9	3092.5	3168.0	3281.6	3394.0	3479.4	3477.9	3477.9	3401.2
22.5°	3226.2	3206.3	3233.4	3267.5	3338.5	3476.5	3625.7	3726.7	3726.7	3686.9	3560.3
25°	3435.3	3415.3	3445.2	3476.5	3539.0	3695.4	3870.3	3995.4	4001.2	3932.9	3731.0
27.5°	3696.9	3671.2	3694.0	3731.0	3768.0	3927.2	4134.7	4279.8	4282.7	4177.5	3893.1
30°	4200.2	4127.7	4056.6	4016.8	4033.9	4191.6	4413.4	4574.2	4588.4	4443.4	4069.4
32.5°	5121.6	5107.4	4857.1	4530.1	4359.4	4476.1	4724.8	4918.3	4926.8	4740.5	4298.3
35°	6553.4	6536.3	6133.9	5511.1	4955.3	4857.1	5103.1	5332.0	5326.3	5115.9	4595.5
37.5°	8262.5	8246.8	7716.5	6883.3	5983.2	5433.0	5590.8	5831.1	5866.6	5590.8	4979.3
40°	9722.7	9664.4	9328.9	8525.5	7348.2	6388.4	6284.7	6443.9	6480.9	6153.9	5467.0
42.5°	10828.9	10779.2	10608.5	10106.6	9000.4	7801.8	7102.2	7163.4	7204.6	6812.2	6027.3
45°	11402.0	11390.6	11458.9	11411.9	10683.9	9536.5	8271.0	8016.5	8032.1	7541.6	6662.9
47.5°	11483.0	11477.3	11788.7	12229.5	12131.4	11493.0	9771.1	9080.1	9024.6	8364.8	7353.9
50°	11005.2	10993.9	11591.1	12417.2	13098.3	13136.6	11474.5	10278.7	10156.4	9216.6	8074.8
52.5°	9479.6	9476.7	10457.9	11832.8	13438.1	14575.6	13158.0	11595.3	11390.6	10118.0	8836.9
55°	7294.2	7346.8	8471.5	10096.7	12818.1	15268.0	14669.4	13057.1	12742.8	11025.2	9539.4
57.5°	5167.0	5243.9	6355.7	7803.2	10895.7	14858.5	15691.7	14521.6	14183.1	11929.5	10251.6
60°	2775.5	2843.8	3957.0	5684.6	8106.1	13331.5	16230.7	15792.7	15472.8	12788.3	10894.3
62.5°	1653.6	1676.4	2137.0	3669.8	5482.7	10184.8	16001.7	16761.0	16498.0	13509.2	11453.1
65°	1187.3	1191.6	1423.3	2240.9	3328.6	6188.0	14396.4	17224.5	17143.4	14052.3	11866.9
67.5°	999.6	996.7	1093.4	1488.7	2267.9	3099.7	11033.7	16569.0	16913.1	14396.4	12101.6
70°	857.4	861.6	975.4	1090.6	1704.8	1754.6	5485.6	14426.3	15160.0	14487.5	12087.3
72.5°	638.4	652.6	757.9	993.8	1286.8	1207.1	1893.9	10696.7	12023.4	13649.9	11460.3
75°	450.7	457.9	533.2	836.1	959.8	878.7	966.9	5529.7	7230.2	10464.9	9380.1
77.5°	347.0	359.8	403.8	584.4	945.6	617.0	591.5	1913.9	2940.4	6321.6	6431.2
80°	187.7	210.4	291.5	422.3	664.0	436.5	292.9	762.1	996.7	2956.1	2479.8
82.5°	96.7	108.0	203.4	304.3	378.2	381.1	145.0	317.0	410.9	912.9	339.8
85°	38.4	46.9	136.5	167.8	194.7	187.7	65.4	127.9	147.9	253.1	103.8
87.5°	8.5	14.2	49.8	38.4	37.0	39.8	15.7	29.8	28.4	29.8	18.4
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°	2550.8	2550.8	2550.8	2550.8	2550.8	2550.8	2550.8	2550.8	2550.8	2550.8	2550.8
2.5°	2566.5	2560.8	2545.2	2528.1	2508.2	2496.8	2489.7	2488.3	2478.3	2471.2	2478.3
5°	2609.1	2603.4	2573.6	2538.0	2499.7	2469.7	2441.3	2415.7	2378.8	2371.6	2368.9
7.5°	2694.4	2678.8	2630.5	2582.1	2509.6	2422.9	2317.6	2196.8	2088.7	2056.0	2040.4
10°	2799.7	2778.4	2717.2	2631.9	2471.2	2235.2	1980.7	1744.7	1557.0	1504.3	1484.4
12.5°	2919.1	2900.6	2819.6	2661.7	2310.6	1882.5	1492.9	1200.1	1018.0	972.5	959.8
15°	3061.3	3034.3	2922.0	2616.2	2023.4	1430.4	1025.2	851.7	786.3	777.8	769.3
17.5°	3212.0	3168.0	3013.0	2452.7	1636.6	1016.6	792.0	742.2	713.8	705.2	701.0
20°	3349.9	3293.0	3067.0	2205.3	1222.8	792.0	709.5	676.8	651.2	641.2	635.6
22.5°	3487.9	3406.8	3067.0	1868.4	917.1	702.4	651.2	621.4	591.5	578.7	571.6
25°	3631.5	3523.4	3013.0	1492.9	738.0	644.1	595.7	563.0	537.5	521.8	516.1
27.5°	3770.8	3621.5	2889.3	1137.5	656.9	593.0	544.6	513.3	489.1	477.8	477.8
30°	3903.0	3718.2	2715.7	863.0	604.3	543.1	497.6	470.7	446.5	435.1	436.5
32.5°	4082.2	3840.5	2530.9	708.1	558.8	496.2	455.0	429.4	408.1	399.5	399.5
35°	4331.0	4021.1	2371.6	695.3	520.4	457.9	416.6	392.5	371.2	364.0	364.0
37.5°	4683.6	4312.5	2287.8	780.6	489.1	423.7	385.3	359.8	339.8	334.2	332.7
40°	5118.7	4707.8	2333.3	865.9	467.8	393.9	356.9	331.3	314.3	307.1	305.7
42.5°	5634.8	5195.5	2584.9	931.3	453.6	368.3	329.8	301.5	290.1	287.2	287.2
45°	6227.8	5731.6	2970.2	1001.0	430.8	344.1	302.9	281.6	273.0	271.6	270.2
47.5°	6901.7	6320.3	3416.7	1087.7	408.1	321.3	281.6	267.3	260.2	257.4	257.4
50°	7570.0	6913.1	3876.0	1136.1	389.6	300.0	264.4	253.1	247.4	246.0	246.0
52.5°	8269.6	7523.1	4247.1	1090.6	373.9	283.0	250.2	241.7	236.1	234.6	234.6
55°	8936.5	8016.5	4311.2	925.7	342.7	265.9	234.6	230.3	223.2	223.2	221.8
57.5°	9510.9	8263.9	3858.9	679.7	311.4	240.3	218.9	214.7	209.0	207.6	206.1
60°	10038.4	8192.8	2978.9	457.9	277.3	214.7	199.1	196.2	190.5	183.4	182.0
62.5°	10335.6	7880.0	2037.5	298.6	243.1	187.7	176.3	174.9	162.1	147.9	145.0
65°	10447.9	7237.3	1271.1	217.5	203.4	160.7	152.1	149.3	130.8	115.2	113.8
67.5°	10349.8	6179.4	641.2	172.0	160.7	133.7	125.2	125.2	112.3	98.1	96.7
70°	9957.4	4632.5	270.2	138.0	123.7	102.4	102.4	108.0	95.2	79.6	78.2
72.5°	9105.7	3116.7	143.6	105.3	92.5	72.5	83.8	88.1	75.3	59.8	59.8
75°	7238.8	1901.1	99.5	78.2	58.3	51.1	64.0	66.8	51.1	39.8	38.4
77.5°	4951.0	1092.0	66.8	49.8	37.0	29.8	44.1	41.2	27.1	18.4	19.9
80°	2174.0	455.0	38.4	22.8	14.2	11.4	15.7	11.4	8.5	5.6	5.6
82.5°	254.5	106.6	14.2	8.5	5.6	2.9	1.4	0.0	0.0	0.0	0.0
85°	52.6	12.8	7.1	2.9	1.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.9	2.9	1.4	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)