

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: P884429

Luminaire Tested: **NAV-SB5B-727-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884429
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-727-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25913 lumens
Efficiency: N/A
Efficacy: 141.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

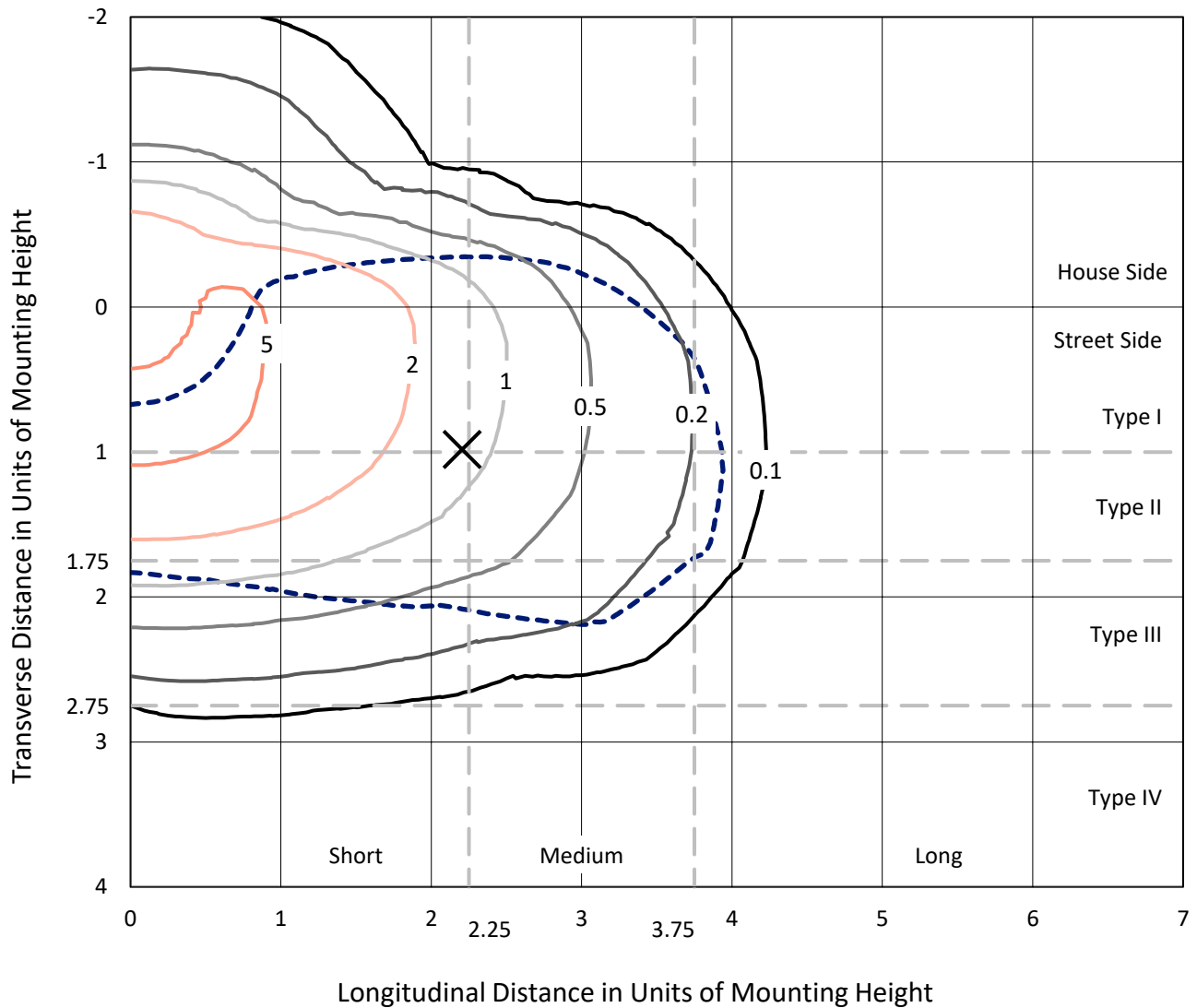
Input Watts (W): 182.7
Input Voltage (V): 120.0
Input Current (Ain): 1.547
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 11.125
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

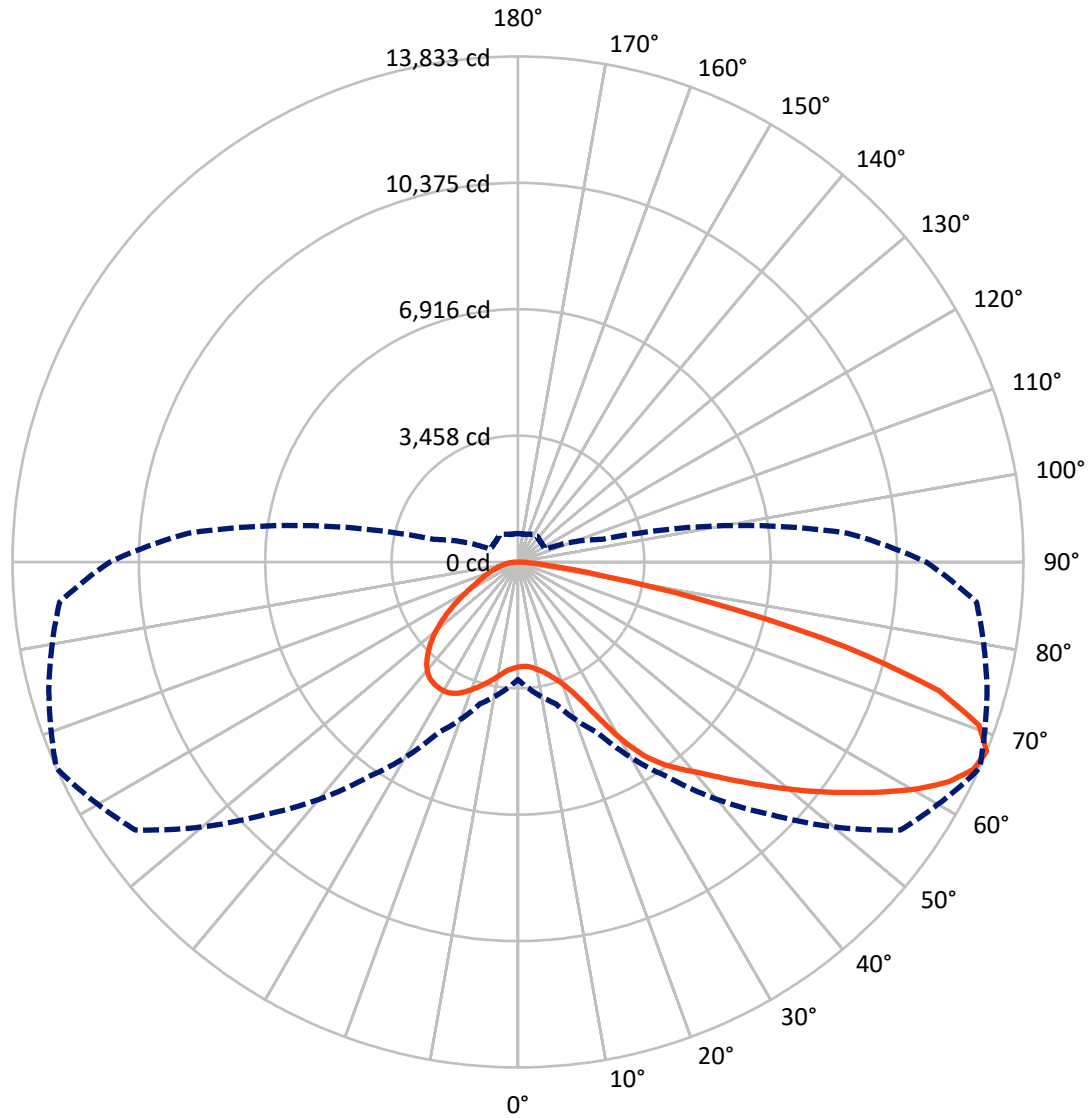
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6443.2	0.0	6443.2
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	19469.8	0.0	19469.8
	% Fixture	75.1	0.0	75.1
Total	Lumens	25913.0	0.0	25913.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.0	1.1
10°-20°	941.5	3.6
20°-30°	1814.6	7.0
30°-40°	3181.7	12.3
40°-50°	4730.1	18.3
50°-60°	5995.9	23.1
60°-70°	5866.8	22.6
70°-80°	2798.5	10.8
80°-90°	299.1	1.2
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°	25913.0	100.0
0°-180°	25913.0	100.0

Coefficient of Utilization



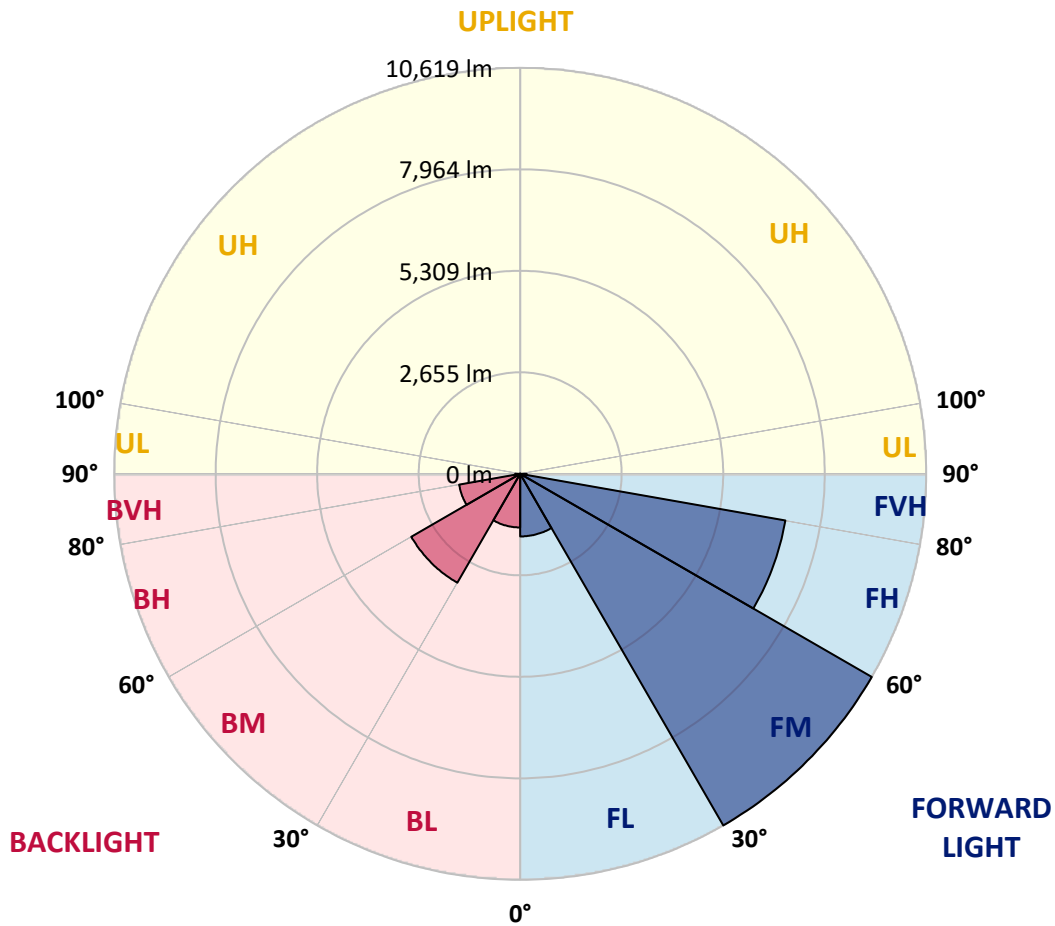
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1637.4	6.3			
FM (30°-60°)	10618.9	41.0			
FH (60°-80°)	7043.9	27.2			G3/7500
FVH (80°-90°)	169.6	0.7			G2/225
BL (0°-30°)	1403.6	5.4	B3/2500		
BM (30°-60°)	3288.7	12.7	B3/5000		
BH (60°-80°)	1621.4	6.3	B3/2500		G3/2500
BVH (80°-90°)	129.5	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1
2.5°	2844.1	2860.5	2856.4	2849.6	2848.2	2850.9	2855.0	2859.1	2857.8	2864.6	2875.5
5°	2836.0	2852.3	2850.9	2850.9	2856.4	2867.3	2874.1	2880.9	2874.1	2882.3	2897.2
7.5°	2841.4	2853.7	2859.1	2864.6	2878.2	2898.6	2914.9	2929.9	2921.7	2931.3	2950.3
10°	2910.9	2920.4	2925.8	2925.8	2935.4	2958.5	2974.8	3002.1	2995.3	3010.2	3034.7
12.5°	3037.5	3047.0	3047.0	3041.6	3048.4	3063.3	3068.8	3098.7	3086.5	3111.0	3135.5
15°	3192.7	3211.7	3196.8	3187.2	3190.0	3204.9	3203.6	3226.7	3214.5	3234.9	3256.7
17.5°	3364.2	3388.7	3364.2	3362.9	3357.4	3373.8	3375.1	3395.5	3373.8	3388.7	3403.7
20°	3567.1	3601.1	3580.7	3587.5	3575.3	3582.1	3588.9	3618.8	3584.8	3595.7	3591.6
22.5°	3853.0	3893.8	3872.1	3897.9	3889.8	3884.3	3883.0	3936.1	3883.0	3887.0	3847.6
25°	4269.6	4318.6	4280.5	4315.9	4315.9	4333.6	4354.0	4422.1	4333.6	4307.7	4205.6
27.5°	4885.0	4934.0	4859.1	4880.9	4874.1	4917.7	4895.9	5064.7	4969.4	4927.2	4721.6
30°	5625.7	5712.8	5571.2	5565.7	5558.9	5628.4	5659.7	5771.3	5674.7	5632.5	5384.7
32.5°	6426.2	6517.4	6348.6	6299.6	6273.7	6315.9	6290.1	6379.9	6313.2	6247.9	5941.5
35°	7273.1	7362.9	7202.3	7107.0	7003.5	6915.0	6822.4	6845.5	6782.9	6683.5	6366.3
37.5°	8073.6	8238.3	8068.2	7966.0	7775.4	7602.5	7343.8	7236.3	7177.7	7086.5	6766.6
40°	8889.1	8983.1	8853.7	8766.6	8559.7	8288.7	7874.8	7647.5	7568.5	7480.0	7209.1
42.5°	9489.5	9579.4	9510.0	9450.1	9288.0	8973.5	8438.5	8153.9	8039.6	7940.2	7710.1
45°	9966.1	10032.8	9989.2	10011.0	9941.6	9636.6	9022.6	8697.2	8578.7	8457.5	8276.5
47.5°	10158.0	10228.8	10298.3	10427.6	10546.1	10321.4	9650.2	9285.3	9160.1	9036.2	8857.8
50°	10136.3	10208.4	10409.9	10684.9	11052.5	10977.7	10311.9	9911.6	9795.9	9654.3	9489.5
52.5°	9962.0	10043.7	10302.4	10759.8	11345.3	11469.1	10985.8	10558.3	10449.4	10280.6	10115.8
55°	9504.5	9553.5	9941.6	10589.6	11414.7	11812.2	11646.1	11247.2	11138.3	10902.8	10723.1
57.5°	8656.3	8727.1	9292.1	10130.8	11240.4	12045.1	12226.1	11971.5	11866.7	11527.7	11339.8
60°	7549.4	7662.4	8309.1	9360.2	10796.6	12043.7	12753.0	12683.6	12596.5	12143.1	11947.0
62.5°	6296.9	6427.6	7049.8	8271.0	10020.5	11702.0	13082.5	13279.9	13235.0	12710.8	12460.3
65°	4836.0	4925.9	5545.3	6861.9	8812.9	10968.1	13120.6	13687.0	13695.2	13142.4	12728.5
67.5°	3219.9	3478.6	4016.4	5149.1	7195.4	9768.7	12785.7	13753.7	13832.7	13290.8	12593.7
70°	1571.2	1911.5	2438.4	3346.5	5149.1	7929.3	11910.3	13206.4	13382.0	12857.9	11790.5
72.5°	652.2	762.4	1049.7	1651.5	2955.8	5350.6	10151.2	11722.4	12047.8	11392.9	9913.0
75°	439.8	476.5	600.4	846.8	1346.5	2638.6	7320.7	8740.7	9264.9	8604.6	7033.4
77.5°	339.0	362.2	437.0	592.2	800.6	998.0	3918.4	5267.6	5538.5	5127.4	3659.7
80°	266.9	284.6	326.8	431.6	567.7	533.7	1335.6	2386.7	2543.3	2133.4	1176.3
82.5°	231.5	238.3	234.2	292.7	377.1	311.8	438.4	880.9	972.1	705.2	383.9
85°	167.5	186.5	194.7	181.1	200.1	157.9	179.7	311.8	343.1	306.3	216.5
87.5°	68.1	100.7	123.9	117.1	73.5	44.9	55.8	91.2	104.8	114.4	70.8
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°	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1
2.5°	2876.8	2886.3	2893.2	2901.3	2906.8	2914.9	2931.3	2940.8	2942.2	2949.0	2947.6
5°	2902.7	2916.3	2931.3	2953.1	2977.6	2998.0	3029.3	3051.1	3059.3	3066.1	3064.7
7.5°	2958.5	2977.6	3004.8	3042.9	3078.3	3105.5	3143.7	3169.5	3195.4	3204.9	3206.3
10°	3041.6	3068.8	3108.3	3160.0	3198.1	3233.5	3273.0	3294.8	3320.7	3331.6	3337.0
12.5°	3145.0	3173.6	3225.4	3297.5	3332.9	3357.4	3371.0	3365.6	3371.0	3380.6	3383.3
15°	3263.5	3294.8	3353.3	3430.9	3455.4	3433.7	3403.7	3376.5	3372.4	3375.1	3384.7
17.5°	3403.7	3426.9	3494.9	3560.3	3542.6	3452.7	3387.4	3343.8	3322.0	3315.2	3324.7
20°	3599.8	3599.8	3655.6	3696.4	3578.0	3425.5	3323.4	3252.6	3207.7	3188.6	3184.5
22.5°	3838.0	3816.2	3851.6	3823.0	3571.2	3349.3	3207.7	3085.1	3017.1	2989.8	2985.7
25°	4140.3	4114.4	4104.9	3927.9	3522.2	3228.1	2998.0	2849.6	2789.7	2774.7	2777.4
27.5°	4596.4	4531.0	4407.1	3985.1	3432.3	3037.5	2752.9	2615.4	2581.4	2582.7	2586.8
30°	5203.6	5072.9	4769.3	3994.6	3285.3	2767.9	2502.4	2404.4	2388.0	2394.9	2418.0
32.5°	5765.9	5642.0	5139.6	3951.0	3059.3	2503.8	2277.8	2212.4	2187.9	2196.1	2207.0
35°	6207.0	6173.0	5482.7	3889.8	2781.5	2256.0	2076.3	2020.4	1972.8	1961.9	1970.1
37.5°	6623.6	6610.0	5740.0	3804.0	2506.5	2080.3	1914.2	1840.7	1771.3	1733.2	1734.5
40°	7081.1	7067.5	5908.8	3671.9	2262.8	1927.9	1768.6	1671.9	1586.1	1516.7	1523.5
42.5°	7595.7	7515.4	5989.2	3482.7	2055.8	1798.5	1650.1	1519.4	1406.4	1342.4	1346.5
45°	8158.0	7976.9	5987.8	3241.7	1881.6	1680.1	1523.5	1338.3	1233.5	1173.6	1170.9
47.5°	8754.3	8418.1	5914.3	2974.8	1712.7	1549.4	1327.4	1185.9	1116.4	1079.7	1071.5
50°	9369.7	8830.6	5789.0	2668.5	1539.8	1401.0	1204.9	1108.2	1055.2	1021.1	1008.9
52.5°	9948.4	9205.0	5637.9	2321.3	1364.2	1256.7	1150.5	1075.6	1019.8	981.6	965.3
55°	10486.2	9527.7	5424.2	1966.0	1221.3	1160.0	1124.6	1062.0	998.0	953.0	935.3
57.5°	10964.0	9737.3	5055.2	1632.4	1119.1	1093.3	1097.4	1038.8	965.3	927.2	902.7
60°	11361.6	9891.2	4509.2	1323.4	1036.1	1027.9	1055.2	995.2	909.5	865.9	846.8
62.5°	11599.8	9888.5	3839.4	1083.7	965.3	968.0	999.3	940.8	853.7	812.8	800.6
65°	11579.4	9646.1	3104.2	927.2	897.2	899.9	940.8	880.9	807.4	782.9	781.5
67.5°	11169.6	9055.2	2381.2	825.1	822.3	834.6	882.2	840.0	778.8	776.0	780.1
70°	10060.0	7828.5	1715.5	743.4	744.7	762.4	825.1	814.2	763.8	769.2	767.9
72.5°	8066.8	5968.7	1151.8	657.6	659.0	687.5	770.6	793.7	748.8	821.0	831.9
75°	5372.4	3722.3	740.6	566.4	567.7	604.5	722.9	754.3	708.0	818.3	825.1
77.5°	2581.4	1673.3	536.4	476.5	476.5	510.6	624.9	675.3	603.1	635.8	582.7
80°	891.8	629.0	422.1	383.9	375.8	398.9	526.9	585.4	520.1	479.2	449.3
82.5°	351.3	326.8	339.0	298.2	270.9	285.9	409.8	483.3	382.6	345.8	344.5
85°	201.5	212.4	239.6	197.4	156.6	175.6	300.9	347.2	288.6	254.6	260.0
87.5°	54.5	74.9	110.3	102.1	70.8	74.9	143.0	192.0	166.1	128.0	132.1
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)