

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: P885167

Luminaire Tested: **NAV-SB6B-827-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885167
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6B-827-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 2700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27516 lumens
Efficiency: N/A
Efficacy: 124.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

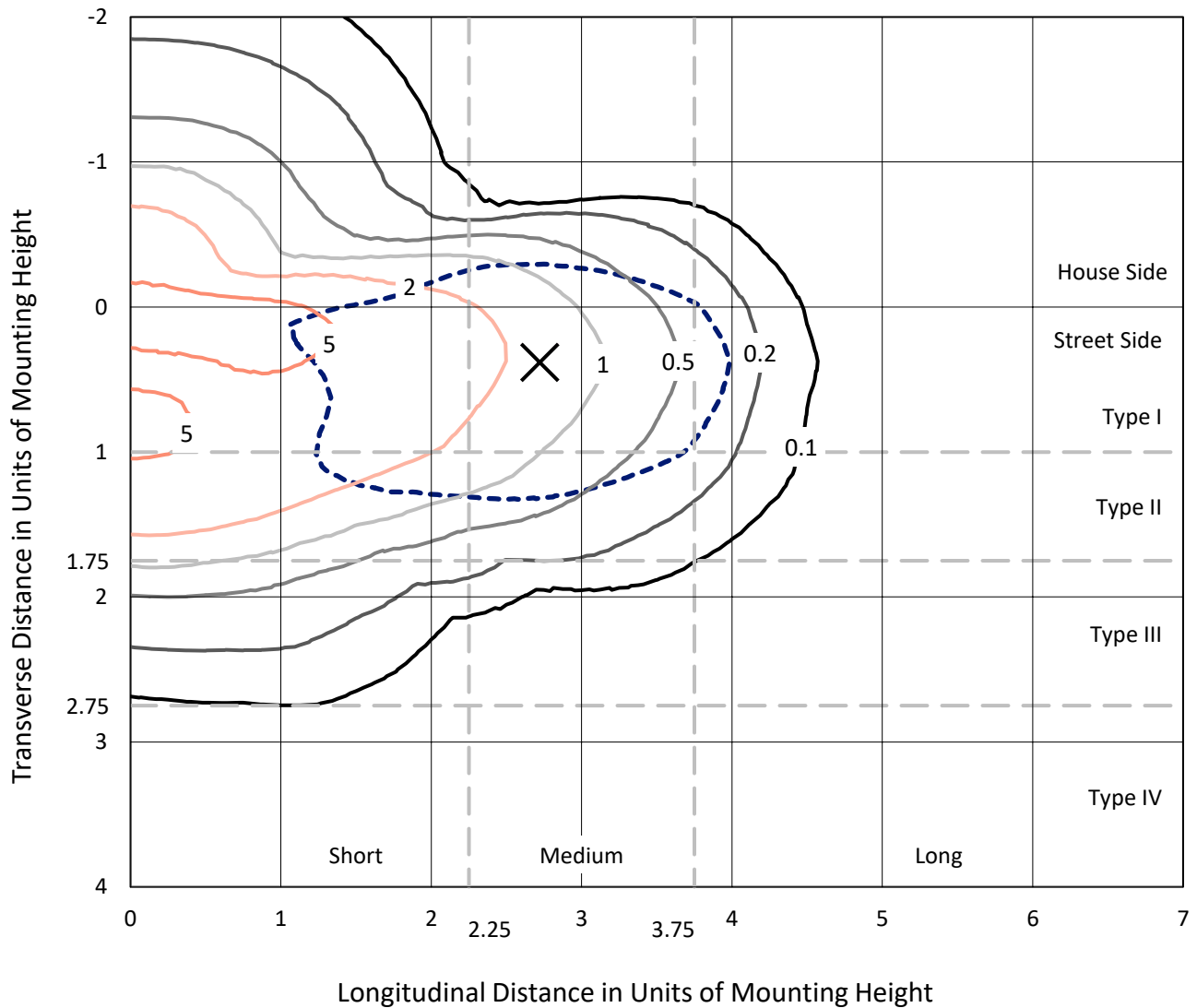
Input Watts (W): 220.4
Input Voltage (V): 120.0
Input Current (Ain): 1.838
Voltage Rise (V): NR
Power Factor: 0.995
Total Harmonic Distortion (THDi): 8.657
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

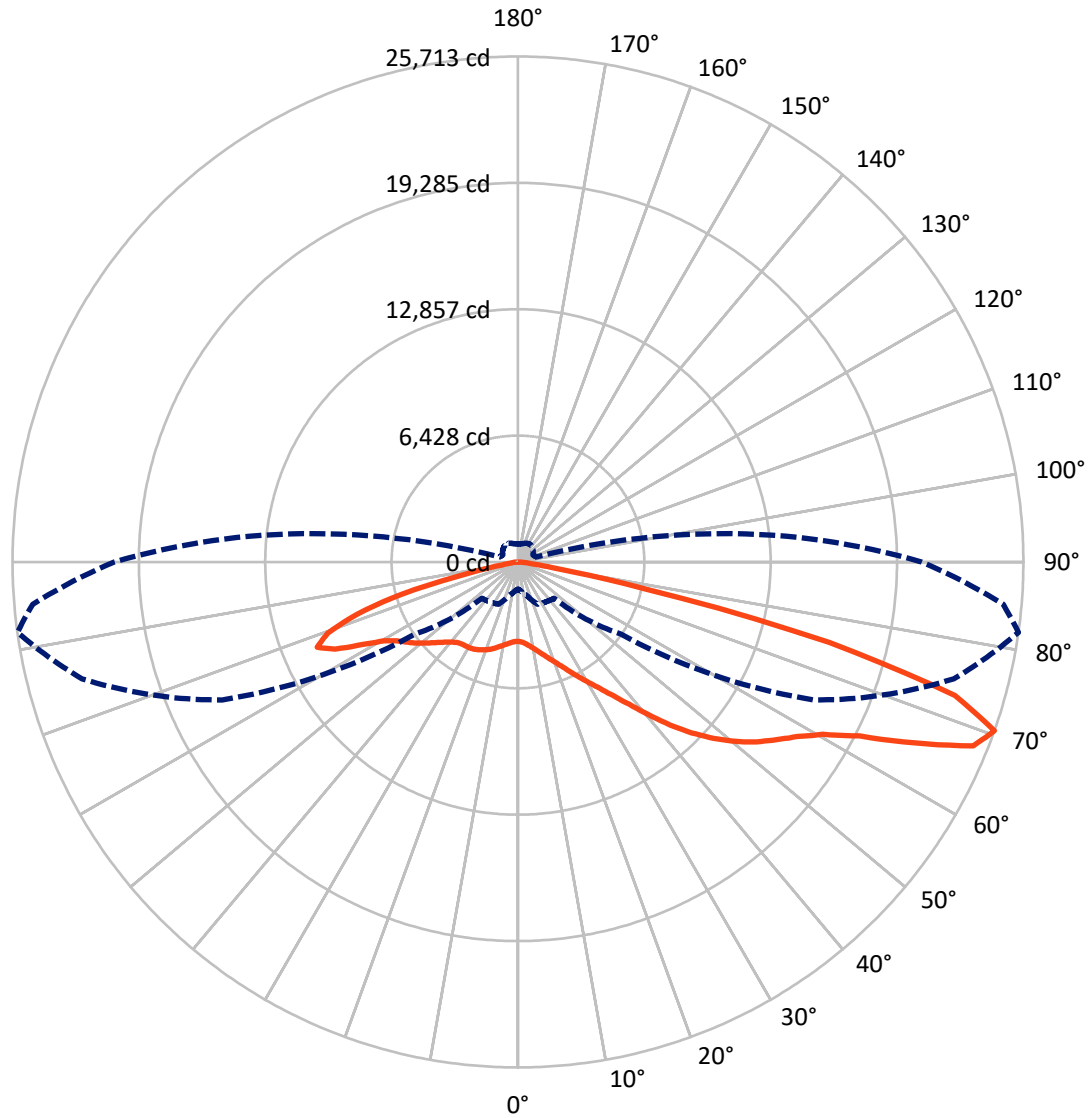
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6783.4	0.0	6783.4
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	20732.6	0.0	20732.6
	% Fixture	75.3	0.0	75.3
Total	Lumens	27516.0	0.0	27516.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	380.9	1.4
10°-20°	1094.3	4.0
20°-30°	1830.7	6.7
30°-40°	2860.1	10.4
40°-50°	4555.0	16.6
50°-60°	6338.8	23.0
60°-70°	6630.7	24.1
70°-80°	3465.6	12.6
80°-90°	359.9	1.3
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°	27516.0	100.0
0°-180°	27516.0	100.0

Coefficient of Utilization



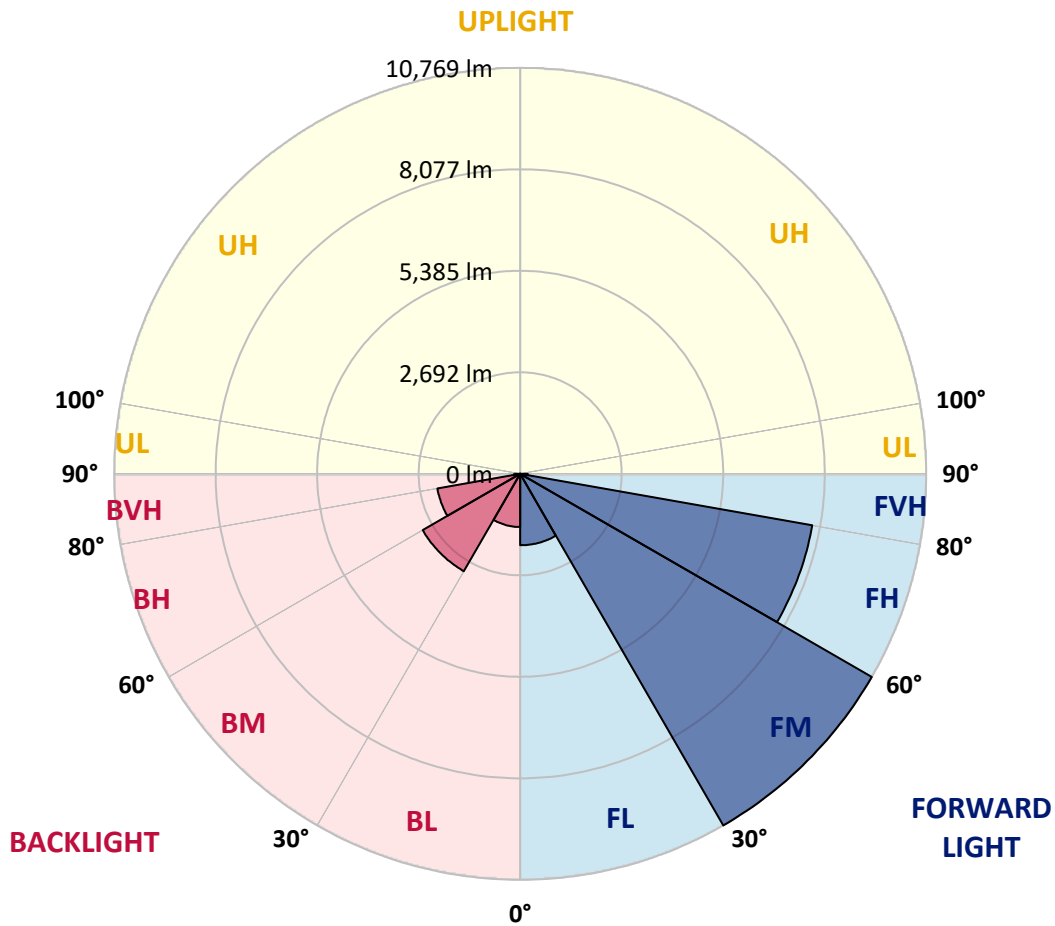
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1894.8	6.9			
FM (30°-60°)	10769.5	39.1			
FH (60°-80°)	7866.9	28.6			G4/12000
FVH (80°-90°)	201.5	0.7			G2/225
BL (0°-30°)	1411.2	5.1	B3/2500		
BM (30°-60°)	2984.4	10.8	B3/5000		
BH (60°-80°)	2229.4	8.1	B3/2500		G3/2500
BVH (80°-90°)	158.4	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	4034.2	4034.2	4034.2	4034.2	4034.2	4034.2	4034.2	4034.2	4034.2	4034.2	4034.2
2.5°	4130.6	4153.9	4146.6	4139.3	4139.3	4129.1	4127.6	4113.0	4101.4	4082.4	4078.0
5°	4183.1	4207.9	4205.0	4210.9	4229.8	4234.2	4238.6	4229.8	4206.5	4183.1	4172.9
7.5°	4136.4	4164.1	4172.9	4207.9	4266.3	4318.9	4358.3	4374.4	4352.5	4318.9	4302.8
10°	3978.7	4009.4	4040.0	4123.3	4226.9	4351.0	4456.2	4518.9	4514.6	4482.4	4454.7
12.5°	3659.0	3691.1	3756.8	3918.8	4108.7	4327.7	4523.3	4654.7	4700.0	4676.6	4628.4
15°	3403.4	3431.2	3480.8	3647.3	3894.0	4226.9	4548.1	4803.6	4919.0	4905.9	4847.5
17.5°	3396.1	3407.8	3438.5	3517.3	3707.1	4069.2	4521.9	4949.7	5170.1	5168.7	5095.7
20°	3524.6	3529.0	3546.5	3562.6	3670.6	3949.5	4454.7	5070.8	5451.9	5451.9	5373.1
22.5°	3702.8	3699.8	3717.4	3702.8	3755.3	3939.3	4412.3	5177.4	5765.8	5789.2	5689.9
25°	3969.9	3955.3	3951.0	3917.4	3927.6	4034.2	4459.1	5298.6	6138.2	6186.3	6062.2
27.5°	4326.2	4302.8	4286.8	4209.4	4183.1	4229.8	4602.2	5444.6	6552.8	6636.0	6478.4
30°	4790.5	4748.2	4724.8	4590.5	4495.6	4502.9	4818.3	5638.8	6986.5	7120.8	6920.8
32.5°	5424.2	5358.5	5295.7	5075.2	4901.5	4844.5	5097.1	5907.5	7456.6	7671.2	7414.3
35°	6133.8	6081.2	6014.1	5673.9	5406.7	5275.3	5473.8	6282.7	8007.1	8347.3	8012.9
37.5°	6817.1	6771.8	6804.0	6345.5	6000.9	5809.6	5967.3	6786.4	8686.0	9188.3	8763.4
40°	7523.8	7488.7	7493.1	7055.1	6653.6	6438.9	6566.0	7418.6	9464.2	10188.4	9665.7
42.5°	8291.8	8265.5	8177.9	7789.5	7338.3	7138.3	7255.1	8148.7	10299.4	11327.3	10655.6
45°	9151.8	9135.7	9053.9	8608.6	8091.7	7866.9	8024.6	8954.6	11138.9	12399.0	11649.9
47.5°	9894.9	9908.1	9897.9	9522.6	8986.8	8656.8	8845.1	9795.6	11920.1	13406.4	12603.4
50°	10252.7	10321.3	10422.0	10305.2	9972.3	9636.5	9673.0	10607.5	12664.7	14351.1	13517.4
52.5°	10065.8	10195.7	10470.2	10657.1	10785.6	10715.5	10617.7	11413.4	13365.5	15203.8	14381.7
55°	9369.3	9551.8	10007.4	10458.5	11114.1	11623.7	11752.2	12307.0	14048.9	15954.2	15199.4
57.5°	8100.5	8396.9	8805.7	9718.3	10822.1	12063.1	13075.0	13546.6	14773.0	16755.8	16055.0
60°	5925.0	6322.1	6830.2	8188.1	9800.0	11828.1	14200.7	15450.5	15802.4	17793.9	17169.0
62.5°	3791.8	4037.1	4504.3	5783.4	7636.2	10623.5	14545.3	17830.4	17547.2	19496.4	18839.4
65°	2596.0	2753.7	3181.5	3899.9	4936.5	7907.8	13622.5	19614.7	20318.4	22194.6	21695.3
67.5°	1886.4	2006.1	2371.2	3000.5	3216.5	4679.5	10570.9	19532.9	23012.3	24974.6	24197.8
70°	1375.4	1460.1	1766.7	2371.2	2474.8	2603.3	6403.9	16604.0	22953.9	25713.4	24783.3
72.5°	1019.1	1077.5	1283.4	1839.7	2003.2	1757.9	3169.8	12067.5	19724.2	23257.5	22511.5
75°	737.3	781.1	933.0	1407.5	1603.2	1338.9	1581.3	7052.2	13758.3	16360.2	16491.6
77.5°	563.6	597.2	696.5	1030.8	1283.4	1004.5	981.2	3244.3	6523.6	6555.7	6923.7
80°	452.6	474.5	528.5	725.7	984.1	751.9	639.5	1309.7	2061.6	1744.8	1830.9
82.5°	332.9	369.4	446.8	509.6	703.8	518.3	389.8	661.4	784.1	674.6	680.4
85°	189.8	214.6	270.1	365.0	449.7	316.8	223.4	293.5	365.0	299.3	267.2
87.5°	67.2	87.6	94.9	143.1	195.7	131.4	86.1	84.7	119.7	89.1	74.5
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°	4034.2	4034.2	4034.2	4034.2	4034.2	4034.2	4034.2	4034.2	4034.2	4034.2	4034.2
2.5°	4063.4	4056.1	4026.9	3987.5	3946.6	3907.2	3894.0	3866.3	3847.3	3837.1	3848.8
5°	4145.2	4121.8	4053.2	3965.6	3873.6	3774.3	3704.2	3640.0	3593.2	3549.4	3567.0
7.5°	4262.0	4221.1	4102.8	3949.5	3786.0	3621.0	3498.3	3404.9	3342.1	3301.2	3310.0
10°	4397.7	4335.0	4153.9	3924.7	3672.1	3435.6	3291.0	3210.7	3171.3	3149.4	3155.2
12.5°	4554.0	4464.9	4206.5	3867.7	3498.3	3228.2	3128.9	3105.6	3107.0	3108.5	3111.4
15°	4746.7	4622.6	4248.8	3743.6	3272.0	3069.1	3051.6	3089.5	3128.9	3147.9	3146.5
17.5°	4964.3	4789.0	4256.1	3539.2	3050.1	2966.9	3022.4	3104.1	3164.0	3190.3	3196.1
20°	5197.9	4958.4	4203.6	3250.1	2867.6	2883.6	2982.9	3088.1	3153.8	3187.3	3196.1
22.5°	5465.1	5139.5	4078.0	2946.4	2718.7	2793.1	2909.9	3012.1	3080.8	3114.3	3123.1
25°	5770.2	5342.4	3880.9	2690.9	2590.2	2690.9	2807.7	2892.4	2947.9	2978.6	2987.3
27.5°	6109.0	5554.1	3618.1	2488.0	2477.7	2585.8	2682.2	2747.9	2777.1	2800.4	2809.2
30°	6449.2	5746.9	3299.8	2334.7	2379.9	2482.1	2550.8	2580.0	2588.7	2593.1	2603.3
32.5°	6817.1	5913.3	2965.4	2207.6	2286.5	2381.4	2422.3	2435.4	2394.5	2366.8	2375.5
35°	7262.4	6091.4	2638.4	2106.9	2194.5	2276.3	2289.4	2277.7	2229.5	2172.6	2175.5
37.5°	7812.9	6313.4	2377.0	2035.3	2108.3	2162.4	2146.3	2143.4	2147.8	2080.6	2085.0
40°	8487.4	6602.5	2185.7	1979.9	2038.3	2049.9	2004.7	2029.5	2051.4	1949.2	1952.1
42.5°	9236.4	6951.4	2064.5	1941.9	1979.9	1952.1	1882.0	1909.8	1906.9	1772.5	1771.1
45°	10000.1	7331.0	2022.2	1914.2	1925.8	1870.4	1793.0	1800.3	1739.0	1617.8	1622.1
47.5°	10759.3	7738.4	2048.5	1890.8	1858.7	1795.9	1736.0	1703.9	1613.4	1522.9	1522.9
50°	11503.9	8166.2	2144.9	1844.1	1766.7	1730.2	1686.4	1629.4	1533.1	1455.7	1449.9
52.5°	12194.6	8596.9	2252.9	1766.7	1651.3	1673.2	1645.5	1579.8	1484.9	1406.1	1407.5
55°	12848.7	9027.6	2295.2	1660.1	1543.3	1623.6	1607.5	1486.4	1372.5	1308.2	1302.4
57.5°	13561.2	9546.0	2248.5	1524.3	1455.7	1566.7	1505.3	1371.0	1305.3	1257.1	1252.7
60°	14548.2	10359.2	2147.8	1356.4	1372.5	1482.0	1376.9	1321.4	1249.8	1195.8	1192.9
62.5°	16187.9	11876.3	1985.7	1190.0	1274.6	1356.4	1315.5	1260.0	1187.0	1134.5	1134.5
65°	18611.6	13984.6	1680.5	1060.0	1165.1	1233.8	1249.8	1194.3	1118.4	1062.9	1065.9
67.5°	20655.7	15307.4	1271.7	952.0	1052.7	1134.5	1179.7	1125.7	1045.4	991.4	992.9
70°	20543.3	14346.7	971.0	845.4	953.4	1036.7	1095.1	1052.7	966.6	915.5	919.8
72.5°	18246.6	12001.8	785.5	737.3	852.7	934.4	1004.5	972.4	884.8	835.2	835.2
75°	13405.0	8519.5	627.8	627.8	727.1	827.9	905.2	884.8	804.5	769.5	759.2
77.5°	5650.5	3574.3	492.0	521.2	604.5	711.1	807.4	814.7	744.6	788.4	715.4
80°	1502.4	985.6	375.2	410.3	474.5	587.0	702.3	699.4	623.5	582.6	541.7
82.5°	572.3	388.4	267.2	289.1	343.1	449.7	556.3	573.8	497.9	430.7	430.7
85°	220.5	166.4	165.0	173.7	200.0	297.9	420.5	435.1	375.2	318.3	328.5
87.5°	56.9	49.6	61.3	58.4	92.0	159.1	240.9	249.7	229.2	132.9	189.8
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)