

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: P884507

Luminaire Tested: **NAV-SB5B-835-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P884507
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-SB5B-835-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23888 lumens
Efficiency: N/A
Efficacy: 130.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

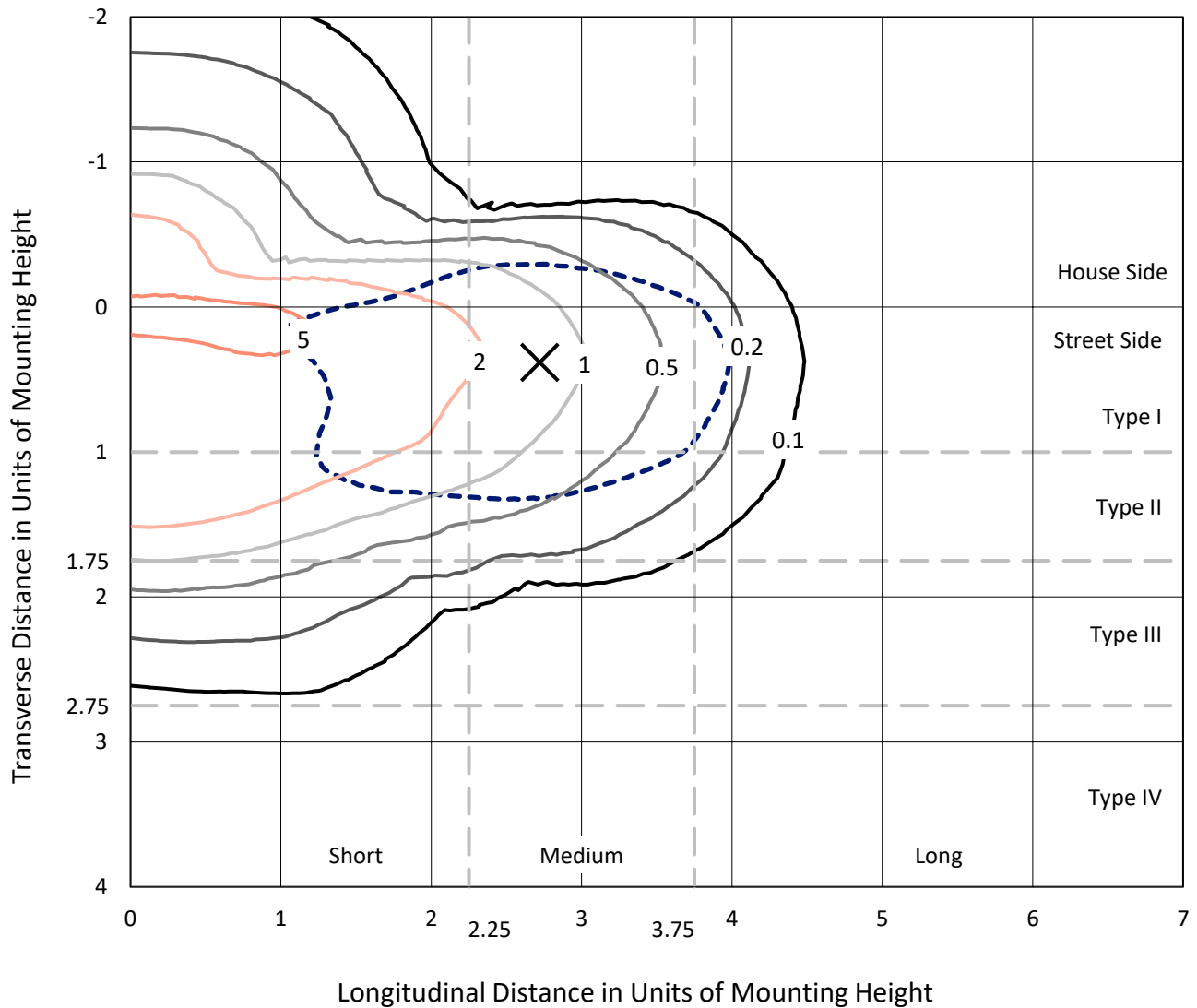
Input Watts (W): 182.7
Input Voltage (V): 120.0
Input Current (Ain): 1.547
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 11.125
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

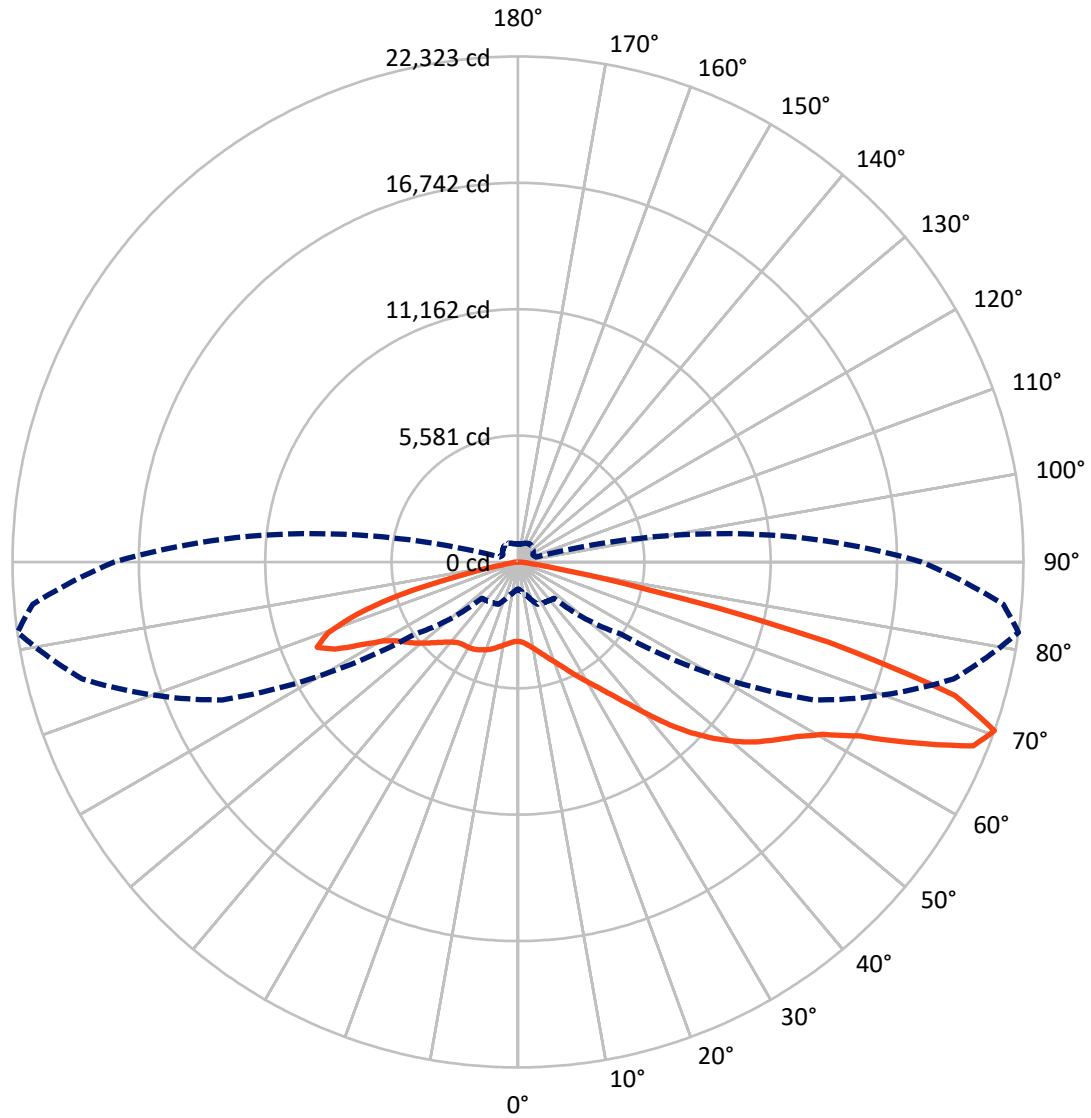
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 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	5889.0	0.0	5889.0
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	17999.0	0.0	17999.0
	% Fixture	75.3	0.0	75.3
Total	Lumens	23888.0	0.0	23888.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	330.7	1.4
10°-20°	950.1	4.0
20°-30°	1589.3	6.7
30°-40°	2483.0	10.4
40°-50°	3954.4	16.6
50°-60°	5503.1	23.0
60°-70°	5756.4	24.1
70°-80°	3008.6	12.6
80°-90°	312.4	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°	23888.0	100.0
0°-180°	23888.0	100.0

Coefficient of Utilization



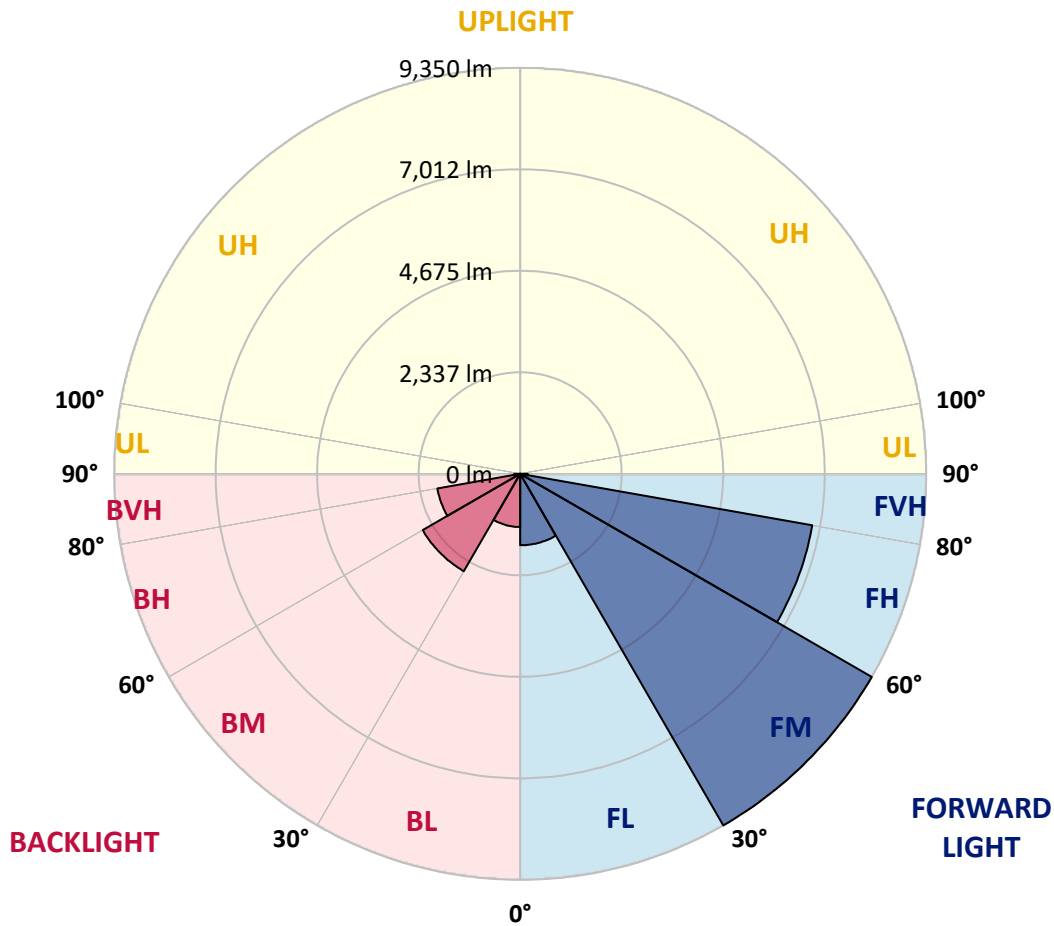
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1645.0	6.9			
FM (30°-60°)	9349.5	39.1			
FH (60°-80°)	6829.7	28.6			G3/7500
FVH (80°-90°)	174.9	0.7			G2/225
BL (0°-30°)	1225.1	5.1	B3/2500		
BM (30°-60°)	2590.9	10.8	B3/5000		
BH (60°-80°)	1935.4	8.1	B3/2500		G3/2500
BVH (80°-90°)	137.5	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-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3502.3	3502.3	3502.3	3502.3	3502.3	3502.3	3502.3	3502.3	3502.3	3502.3	3502.3
2.5°	3585.9	3606.2	3599.9	3593.5	3593.5	3584.7	3583.4	3570.7	3560.6	3544.1	3540.3
5°	3631.6	3653.1	3650.6	3655.7	3672.1	3675.9	3679.7	3672.1	3651.9	3631.6	3622.7
7.5°	3591.0	3615.1	3622.7	3653.1	3703.8	3749.5	3783.7	3797.6	3778.6	3749.5	3735.5
10°	3454.1	3480.7	3507.3	3579.6	3669.6	3777.3	3868.6	3923.1	3919.3	3891.4	3867.3
12.5°	3176.5	3204.4	3261.4	3402.1	3566.9	3757.1	3926.9	4041.0	4080.3	4060.0	4018.2
15°	2954.7	2978.8	3021.9	3166.4	3380.6	3669.6	3948.5	4170.3	4270.4	4259.0	4208.3
17.5°	2948.4	2958.5	2985.1	3053.6	3218.3	3532.7	3925.6	4297.0	4488.4	4487.2	4423.8
20°	3059.9	3063.7	3078.9	3092.9	3186.7	3428.8	3867.3	4402.2	4733.1	4733.1	4664.6
22.5°	3214.5	3212.0	3227.2	3214.5	3260.2	3419.9	3830.6	4494.8	5005.6	5025.9	4939.7
25°	3446.5	3433.8	3430.0	3400.9	3409.7	3502.3	3871.1	4600.0	5328.8	5370.7	5262.9
27.5°	3755.8	3735.5	3721.6	3654.4	3631.6	3672.1	3995.4	4726.7	5688.8	5761.1	5624.2
30°	4158.9	4122.1	4101.8	3985.2	3902.8	3909.2	4183.0	4895.3	6065.3	6181.9	6008.3
32.5°	4709.0	4652.0	4597.5	4406.1	4255.2	4205.8	4425.1	5128.6	6473.4	6659.8	6436.7
35°	5325.0	5279.4	5221.1	4925.8	4693.8	4579.7	4752.1	5454.3	6951.3	7246.7	6956.4
37.5°	5918.3	5879.0	5906.8	5508.8	5209.7	5043.6	5180.5	5891.6	7540.7	7976.8	7607.9
40°	6531.8	6501.3	6505.1	6124.9	5776.3	5590.0	5700.2	6440.5	8216.4	8845.1	8391.3
42.5°	7198.5	7175.7	7099.6	6762.5	6370.8	6197.1	6298.5	7074.3	8941.4	9833.8	9250.7
45°	7945.1	7931.1	7860.2	7473.6	7024.8	6829.6	6966.5	7774.0	9670.2	10764.2	10113.9
47.5°	8590.3	8601.7	8592.8	8267.1	7801.9	7515.4	7678.9	8504.1	10348.4	11638.8	10941.6
50°	8900.8	8960.4	9047.9	8946.5	8657.5	8365.9	8397.6	9208.9	10994.9	12458.9	11735.1
52.5°	8738.6	8851.4	9089.7	9252.0	9363.5	9302.7	9217.7	9908.5	11603.3	13199.1	12485.5
55°	8134.0	8292.4	8687.9	9079.6	9648.7	10091.1	10202.6	10684.3	12196.5	13850.7	13195.3
57.5°	7032.4	7289.8	7644.7	8436.9	9395.2	10472.6	11351.0	11760.5	12825.2	14546.6	13938.1
60°	5143.8	5488.6	5929.7	7108.5	8507.9	10268.5	12328.3	13413.4	13718.8	15447.8	14905.3
62.5°	3291.9	3504.8	3910.4	5020.8	6629.4	9222.8	12627.5	15479.5	15233.6	16925.8	16355.4
65°	2253.7	2390.6	2762.0	3385.7	4285.6	6865.1	11826.4	17028.5	17639.4	19268.2	18834.7
67.5°	1637.7	1741.6	2058.5	2604.8	2792.4	4062.5	9177.2	16957.5	19978.1	21681.7	21007.3
70°	1194.0	1267.6	1533.8	2058.5	2148.5	2260.1	5559.5	14414.7	19927.4	22323.1	21515.6
72.5°	884.8	935.5	1114.2	1597.1	1739.1	1526.1	2751.9	10476.4	17123.5	20191.0	19543.3
75°	640.1	678.1	810.0	1221.9	1391.8	1162.4	1372.8	6122.3	11944.3	14203.1	14317.1
77.5°	489.3	518.4	604.6	894.9	1114.2	872.1	851.8	2816.5	5663.5	5691.4	6010.8
80°	392.9	412.0	458.9	630.0	854.3	652.8	555.2	1137.0	1789.8	1514.7	1589.5
82.5°	289.0	320.7	387.9	442.4	611.0	450.0	338.4	574.2	680.7	585.6	590.7
85°	164.8	186.3	234.5	316.9	390.4	275.1	193.9	254.8	316.9	259.9	232.0
87.5°	58.3	76.1	82.4	124.2	169.9	114.1	74.8	73.5	103.9	77.3	64.6
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°	3502.3	3502.3	3502.3	3502.3	3502.3	3502.3	3502.3	3502.3	3502.3	3502.3	3502.3
2.5°	3527.6	3521.3	3495.9	3461.7	3426.2	3392.0	3380.6	3356.5	3340.0	3331.2	3341.3
5°	3598.6	3578.3	3518.8	3442.7	3362.8	3276.7	3215.8	3160.0	3119.5	3081.4	3096.7
7.5°	3700.0	3664.5	3561.9	3428.8	3286.8	3143.6	3037.1	2956.0	2901.5	2866.0	2873.6
10°	3817.9	3763.4	3606.2	3407.2	3187.9	2982.6	2857.1	2787.4	2753.1	2734.1	2739.2
12.5°	3953.5	3876.2	3651.9	3357.8	3037.1	2802.6	2716.4	2696.1	2697.4	2698.6	2701.2
15°	4120.9	4013.1	3688.6	3250.0	2840.6	2664.4	2649.2	2682.2	2716.4	2732.9	2731.6
17.5°	4309.7	4157.6	3694.9	3072.6	2647.9	2575.7	2623.9	2694.8	2746.8	2769.6	2774.7
20°	4512.5	4304.6	3649.3	2821.6	2489.5	2503.4	2589.6	2680.9	2737.9	2767.1	2774.7
22.5°	4744.5	4461.8	3540.3	2557.9	2360.2	2424.9	2526.3	2615.0	2674.6	2703.7	2711.3
25°	5009.4	4638.0	3369.2	2336.1	2248.7	2336.1	2437.5	2511.0	2559.2	2585.8	2593.4
27.5°	5303.5	4821.8	3141.0	2159.9	2151.1	2244.9	2328.5	2385.6	2410.9	2431.2	2438.8
30°	5598.8	4989.1	2864.7	2026.8	2066.1	2154.9	2214.4	2239.8	2247.4	2251.2	2260.1
32.5°	5918.3	5133.6	2574.4	1916.6	1985.0	2067.4	2102.9	2114.3	2078.8	2054.7	2062.3
35°	6304.9	5288.3	2290.5	1829.1	1905.1	1976.1	1987.5	1977.4	1935.6	1886.1	1888.7
37.5°	6782.7	5480.9	2063.6	1767.0	1830.4	1877.3	1863.3	1860.8	1864.6	1806.3	1810.1
40°	7368.3	5731.9	1897.5	1718.8	1769.5	1779.7	1740.4	1761.9	1780.9	1692.2	1694.7
42.5°	8018.6	6034.9	1792.3	1685.9	1718.8	1694.7	1633.9	1658.0	1655.4	1538.8	1537.6
45°	8681.5	6364.4	1755.6	1661.8	1671.9	1623.7	1556.6	1562.9	1509.7	1404.5	1408.3
47.5°	9340.7	6718.1	1778.4	1641.5	1613.6	1559.1	1507.1	1479.2	1400.7	1322.1	1322.1
50°	9987.1	7089.5	1862.1	1600.9	1533.8	1502.1	1464.0	1414.6	1330.9	1263.8	1258.7
52.5°	10586.7	7463.4	1955.9	1533.8	1433.6	1452.6	1428.5	1371.5	1289.1	1220.7	1221.9
55°	11154.6	7837.3	1992.6	1441.2	1339.8	1409.5	1395.6	1290.4	1191.5	1135.7	1130.7
57.5°	11773.1	8287.3	1952.0	1323.3	1263.8	1360.1	1306.9	1190.2	1133.2	1091.4	1087.6
60°	12630.0	8993.4	1864.6	1177.6	1191.5	1286.6	1195.3	1147.1	1085.0	1038.1	1035.6
62.5°	14053.5	10310.4	1723.9	1033.1	1106.6	1177.6	1142.1	1093.9	1030.5	984.9	984.9
65°	16157.6	12140.7	1459.0	920.3	1011.5	1071.1	1085.0	1036.9	971.0	922.8	925.3
67.5°	17932.2	13289.1	1104.0	826.5	913.9	984.9	1024.2	977.3	907.6	860.7	861.9
70°	17834.6	12455.1	842.9	733.9	827.7	900.0	950.7	913.9	839.1	794.8	798.6
72.5°	15840.7	10419.4	681.9	640.1	740.3	811.2	872.1	844.2	768.1	725.0	725.0
75°	11637.5	7396.2	545.1	545.1	631.2	718.7	785.9	768.1	698.4	668.0	659.1
77.5°	4905.5	3103.0	427.2	452.5	524.8	617.3	701.0	707.3	646.5	684.5	621.1
80°	1304.3	855.6	325.8	356.2	412.0	509.6	609.7	607.2	541.2	505.8	470.3
82.5°	496.9	337.2	232.0	251.0	297.9	390.4	482.9	498.2	432.2	373.9	373.9
85°	191.4	144.5	143.2	150.8	173.7	258.6	365.1	377.7	325.8	276.3	285.2
87.5°	49.4	43.1	53.2	50.7	79.9	138.2	209.1	216.8	199.0	115.3	164.8
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)