

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: P883997

Luminaire Tested: **NAV-SB4C-835-U-T2**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883997
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-SB4C-835-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25374 lumens
Efficiency: N/A
Efficacy: 126.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

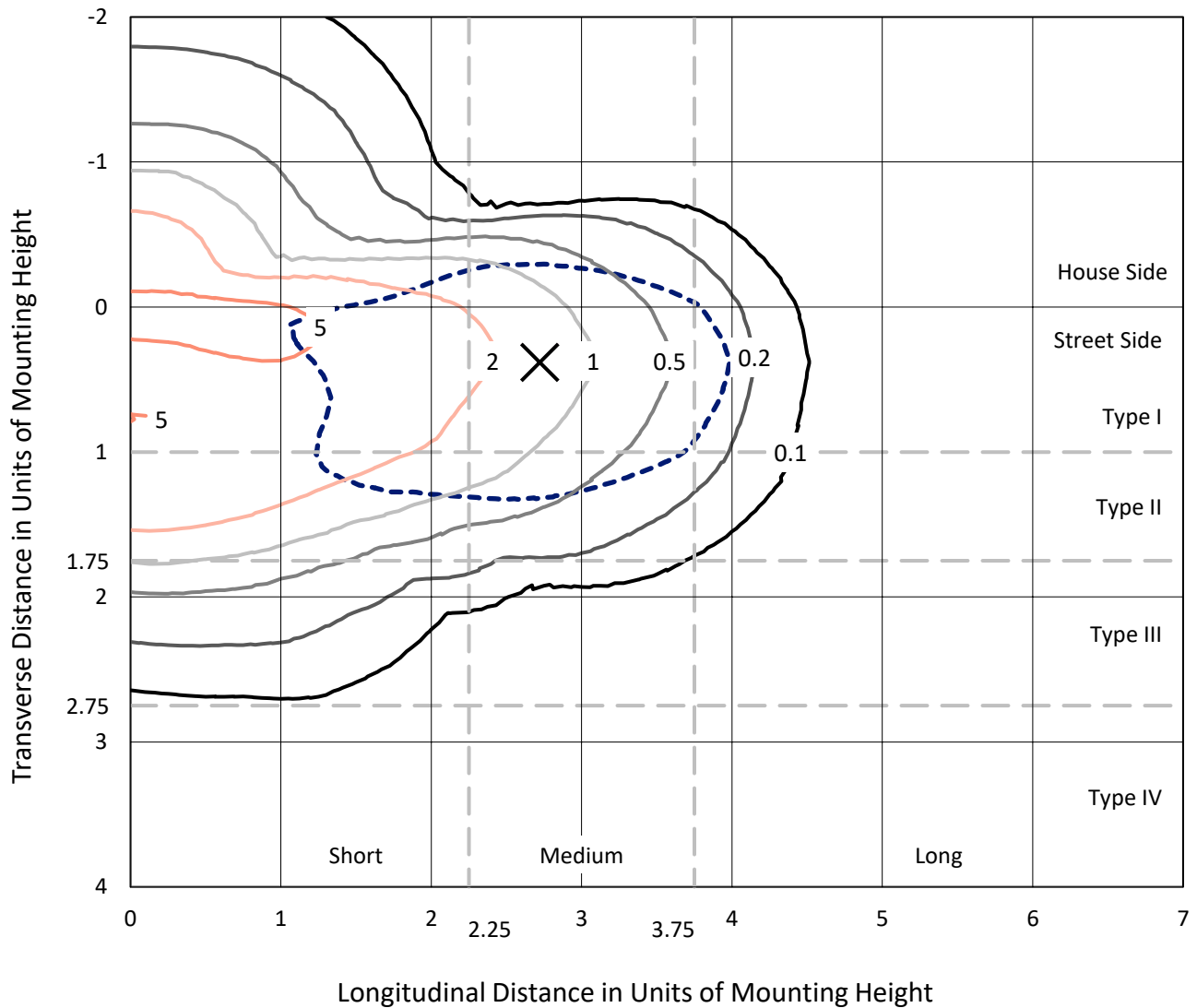
Input Watts (W): 200.7
Input Voltage (V): 120.0
Input Current (Ain): 1.714
Voltage Rise (V): NR
Power Factor: 0.994
Total Harmonic Distortion (THDi): 9.472
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

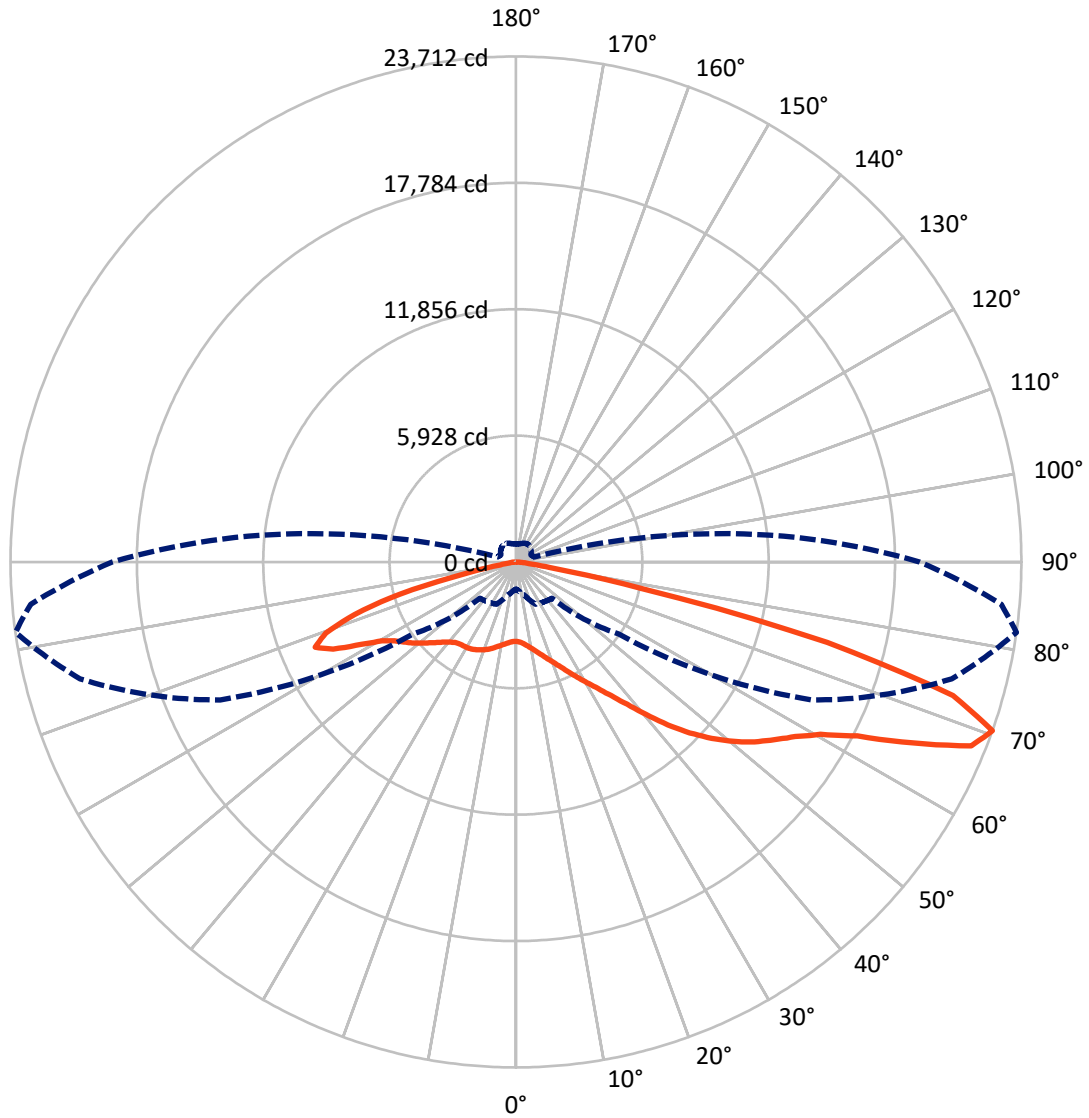
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 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	6255.3	0.0	6255.3
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	19118.7	0.0	19118.7
	% Fixture	75.3	0.0	75.3
Total	Lumens	25374.0	0.0	25374.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	351.2	1.4
10°-20°	1009.2	4.0
20°-30°	1688.2	6.7
30°-40°	2637.4	10.4
40°-50°	4200.4	16.6
50°-60°	5845.4	23.0
60°-70°	6114.5	24.1
70°-80°	3195.8	12.6
80°-90°	331.8	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°	25374.0	100.0
0°-180°	25374.0	100.0

Coefficient of Utilization



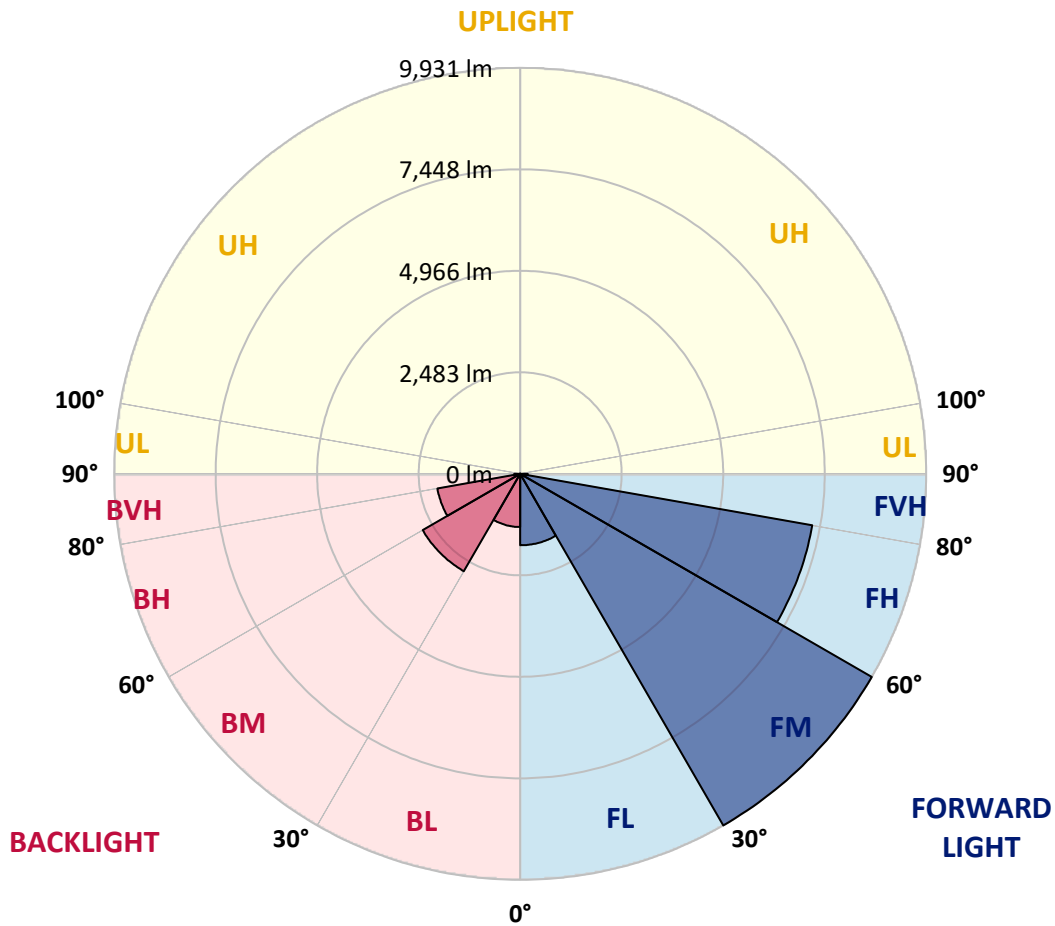
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1747.3	6.9			
FM (30°-60°)	9931.1	39.1			
FH (60°-80°)	7254.5	28.6			G3/7500
FVH (80°-90°)	185.8	0.7			G2/225
BL (0°-30°)	1301.3	5.1	B3/2500		
BM (30°-60°)	2752.1	10.8	B3/5000		
BH (60°-80°)	2055.8	8.1	B3/2500		G3/2500
BVH (80°-90°)	146.1	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°	3720.1	3720.1	3720.1	3720.1	3720.1	3720.1	3720.1	3720.1	3720.1	3720.1	3720.1
2.5°	3809.0	3830.6	3823.8	3817.1	3817.1	3807.7	3806.3	3792.9	3782.1	3764.6	3760.5
5°	3857.5	3880.4	3877.7	3883.1	3900.6	3904.6	3908.6	3900.6	3879.0	3857.5	3848.1
7.5°	3814.4	3840.0	3848.1	3880.4	3934.2	3982.7	4019.0	4033.9	4013.7	3982.7	3967.9
10°	3669.0	3697.3	3725.5	3802.3	3897.9	4012.3	4109.3	4167.2	4163.1	4133.5	4107.9
12.5°	3374.1	3403.7	3464.3	3613.8	3788.8	3990.8	4171.2	4292.4	4334.1	4312.6	4268.1
15°	3138.5	3164.1	3209.9	3363.3	3590.9	3897.9	4194.1	4429.7	4536.1	4524.0	4470.1
17.5°	3131.8	3142.5	3170.8	3243.5	3418.5	3752.5	4169.8	4564.3	4767.7	4766.3	4699.0
20°	3250.2	3254.3	3270.4	3285.3	3384.9	3642.1	4107.9	4676.1	5027.5	5027.5	4954.8
22.5°	3414.5	3411.8	3428.0	3414.5	3463.0	3632.6	4068.9	4774.4	5317.0	5338.5	5247.0
25°	3660.9	3647.4	3643.4	3612.4	3621.9	3720.1	4112.0	4886.1	5660.3	5704.8	5590.3
27.5°	3989.4	3967.9	3953.1	3881.7	3857.5	3900.6	4243.9	5020.8	6042.7	6119.5	5974.0
30°	4417.6	4378.5	4357.0	4233.1	4145.6	4152.3	4443.2	5199.9	6442.6	6566.5	6382.0
32.5°	5001.9	4941.3	4883.4	4680.1	4519.9	4467.4	4700.3	5447.6	6876.1	7074.1	6837.1
35°	5656.3	5607.8	5545.9	5232.2	4985.8	4864.6	5047.7	5793.6	7383.7	7697.5	7389.1
37.5°	6286.4	6244.7	6274.3	5851.5	5533.8	5357.4	5502.8	6258.1	8009.8	8473.0	8081.2
40°	6938.1	6905.8	6909.8	6505.9	6135.6	5937.7	6054.8	6841.1	8727.5	9395.3	8913.3
42.5°	7646.3	7622.1	7541.3	7183.1	6767.1	6582.6	6690.3	7514.3	9497.6	10445.5	9826.1
45°	8439.3	8424.5	8349.1	7938.5	7461.8	7254.5	7399.9	8257.6	10271.8	11433.8	10743.0
47.5°	9124.7	9136.8	9127.3	8781.3	8287.2	7982.9	8156.6	9033.1	10992.1	12362.8	11622.3
50°	9454.5	9517.8	9610.7	9503.0	9196.0	8886.3	8920.0	9781.7	11678.8	13233.9	12465.1
52.5°	9282.2	9402.0	9655.1	9827.5	9946.0	9881.3	9791.1	10524.9	12325.1	14020.2	13262.2
55°	8639.9	8808.2	9228.3	9644.4	10248.9	10718.8	10837.3	11348.9	12955.2	14712.3	14016.2
57.5°	7469.9	7743.2	8120.2	8961.7	9979.6	11124.1	12057.1	12492.0	13623.0	15451.5	14805.2
60°	5463.8	5830.0	6298.5	7550.7	9037.1	10907.3	13095.2	14247.8	14572.3	16408.8	15832.5
62.5°	3496.6	3722.8	4153.7	5333.2	7041.8	9796.5	13413.0	16442.4	16181.2	17978.7	17372.8
65°	2393.9	2539.3	2933.8	3596.3	4552.2	7292.2	12562.1	18087.7	18736.7	20466.9	20006.4
67.5°	1739.6	1850.0	2186.6	2766.9	2966.2	4315.3	9748.0	18012.3	21220.9	23030.4	22314.1
70°	1268.3	1346.4	1629.2	2186.6	2282.2	2400.7	5905.4	15311.4	21167.0	23711.7	22854.1
72.5°	939.8	993.7	1183.5	1696.5	1847.3	1621.1	2923.1	11128.1	18188.7	21447.1	20759.0
75°	679.9	720.3	860.4	1297.9	1478.4	1234.7	1458.2	6503.2	12687.3	15086.6	15207.8
77.5°	519.7	550.7	642.2	950.6	1183.5	926.3	904.8	2991.7	6015.8	6045.4	6384.7
80°	417.4	437.6	487.4	669.2	907.5	693.4	589.7	1207.7	1901.1	1609.0	1688.4
82.5°	307.0	340.6	412.0	469.9	649.0	478.0	359.5	609.9	723.0	622.0	627.4
85°	175.0	197.9	249.1	336.6	414.7	292.2	206.0	270.6	336.6	276.0	246.4
87.5°	61.9	80.8	87.5	131.9	180.4	121.2	79.4	78.1	110.4	82.1	68.7
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°	3720.1	3720.1	3720.1	3720.1	3720.1	3720.1	3720.1	3720.1	3720.1	3720.1	3720.1
2.5°	3747.1	3740.3	3713.4	3677.1	3639.4	3603.0	3590.9	3565.3	3547.8	3538.4	3549.2
5°	3822.5	3800.9	3737.6	3656.9	3572.0	3480.5	3415.9	3356.6	3313.5	3273.1	3289.3
7.5°	3930.2	3892.5	3783.4	3642.1	3491.3	3339.1	3226.0	3139.8	3081.9	3044.2	3052.3
10°	4055.4	3997.5	3830.6	3619.2	3386.2	3168.1	3034.8	2960.8	2924.4	2904.2	2909.6
12.5°	4199.5	4117.3	3879.0	3566.7	3226.0	2976.9	2885.4	2863.8	2865.2	2866.5	2869.2
15°	4377.2	4262.8	3918.1	3452.2	3017.3	2830.2	2814.0	2849.0	2885.4	2902.9	2901.5
17.5°	4577.8	4416.2	3924.8	3263.7	2812.7	2735.9	2787.1	2862.5	2917.7	2941.9	2947.3
20°	4793.2	4572.4	3876.3	2997.1	2644.4	2659.2	2750.7	2847.7	2908.3	2939.2	2947.3
22.5°	5039.6	4739.4	3760.5	2717.1	2507.0	2575.7	2683.4	2777.7	2840.9	2871.9	2880.0
25°	5321.0	4926.5	3578.8	2481.4	2388.5	2481.4	2589.2	2667.2	2718.4	2746.7	2754.8
27.5°	5633.4	5121.8	3336.4	2294.3	2284.9	2384.5	2473.4	2534.0	2560.9	2582.4	2590.5
30°	5947.1	5299.5	3042.9	2152.9	2194.7	2288.9	2352.2	2379.1	2387.2	2391.2	2400.7
32.5°	6286.4	5453.0	2734.6	2035.8	2108.5	2196.0	2233.7	2245.8	2208.1	2182.5	2190.6
35°	6697.1	5617.2	2433.0	1942.9	2023.7	2099.1	2111.2	2100.4	2056.0	2003.5	2006.2
37.5°	7204.7	5821.9	2192.0	1876.9	1944.2	1994.0	1979.2	1976.5	1980.6	1918.6	1922.7
40°	7826.7	6088.5	2015.6	1825.7	1879.6	1890.4	1848.6	1871.5	1891.7	1797.5	1800.2
42.5°	8517.4	6410.3	1903.8	1790.7	1825.7	1800.2	1735.5	1761.1	1758.4	1634.5	1633.2
45°	9221.6	6760.4	1864.8	1765.2	1775.9	1724.8	1653.4	1660.1	1603.6	1491.8	1495.9
47.5°	9921.7	7136.0	1889.0	1743.6	1714.0	1656.1	1600.9	1571.3	1487.8	1404.3	1404.3
50°	10608.4	7530.5	1977.9	1700.5	1629.2	1595.5	1555.1	1502.6	1413.7	1342.4	1337.0
52.5°	11245.3	7927.7	2077.5	1629.2	1522.8	1543.0	1517.4	1456.8	1369.3	1296.6	1297.9
55°	11848.5	8324.9	2116.6	1530.9	1423.2	1497.2	1482.4	1370.7	1265.6	1206.4	1201.0
57.5°	12505.5	8802.9	2073.5	1405.7	1342.4	1444.7	1388.2	1264.3	1203.7	1159.3	1155.2
60°	13415.7	9552.8	1980.6	1250.8	1265.6	1366.6	1269.7	1218.5	1152.5	1102.7	1100.0
62.5°	14927.7	10951.7	1831.1	1097.3	1175.4	1250.8	1213.1	1162.0	1094.6	1046.2	1046.2
65°	17162.8	12896.0	1549.7	977.5	1074.4	1137.7	1152.5	1101.4	1031.4	980.2	982.9
67.5°	19047.7	14115.8	1172.7	877.9	970.8	1046.2	1087.9	1038.1	964.0	914.2	915.6
70°	18944.1	13229.9	895.4	779.6	879.2	956.0	1009.8	970.8	891.3	844.2	848.2
72.5°	16826.2	11067.5	724.4	679.9	786.3	861.7	926.3	896.7	815.9	770.1	770.1
75°	12361.4	7856.3	579.0	579.0	670.5	763.4	834.8	815.9	741.9	709.6	700.1
77.5°	5210.6	3296.0	453.7	480.7	557.4	655.7	744.6	751.3	686.7	727.1	659.7
80°	1385.5	908.8	346.0	378.3	437.6	541.3	647.6	644.9	574.9	537.2	499.5
82.5°	527.8	358.1	246.4	266.6	316.4	414.7	513.0	529.1	459.1	397.2	397.2
85°	203.3	153.5	152.1	160.2	184.5	274.7	387.8	401.2	346.0	293.5	302.9
87.5°	52.5	45.8	56.5	53.9	84.8	146.8	222.2	230.2	211.4	122.5	175.0
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)