

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: P966866

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

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966866
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
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: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28274.6 lumens
Efficiency: N/A
Efficacy: 140.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

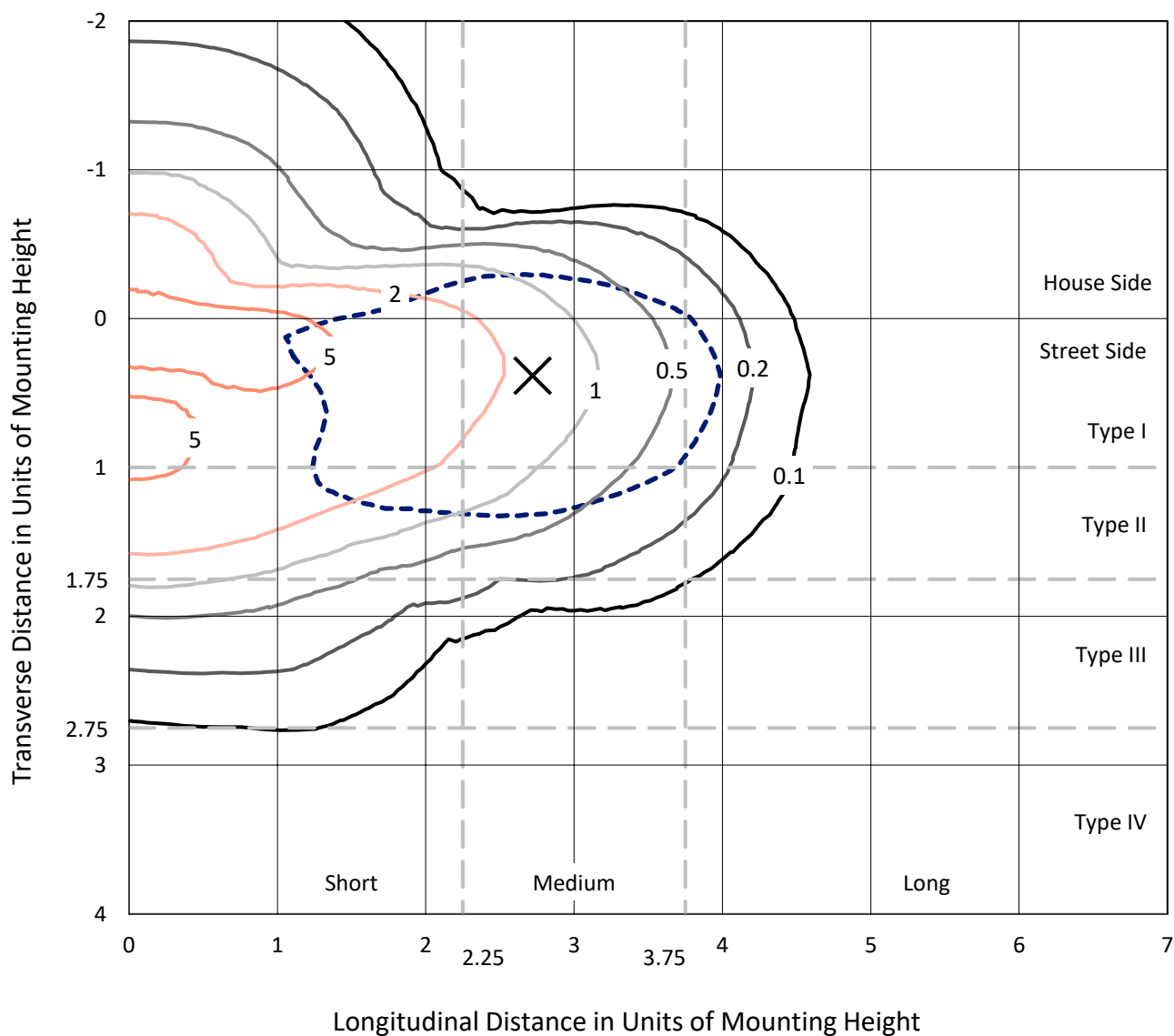
Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

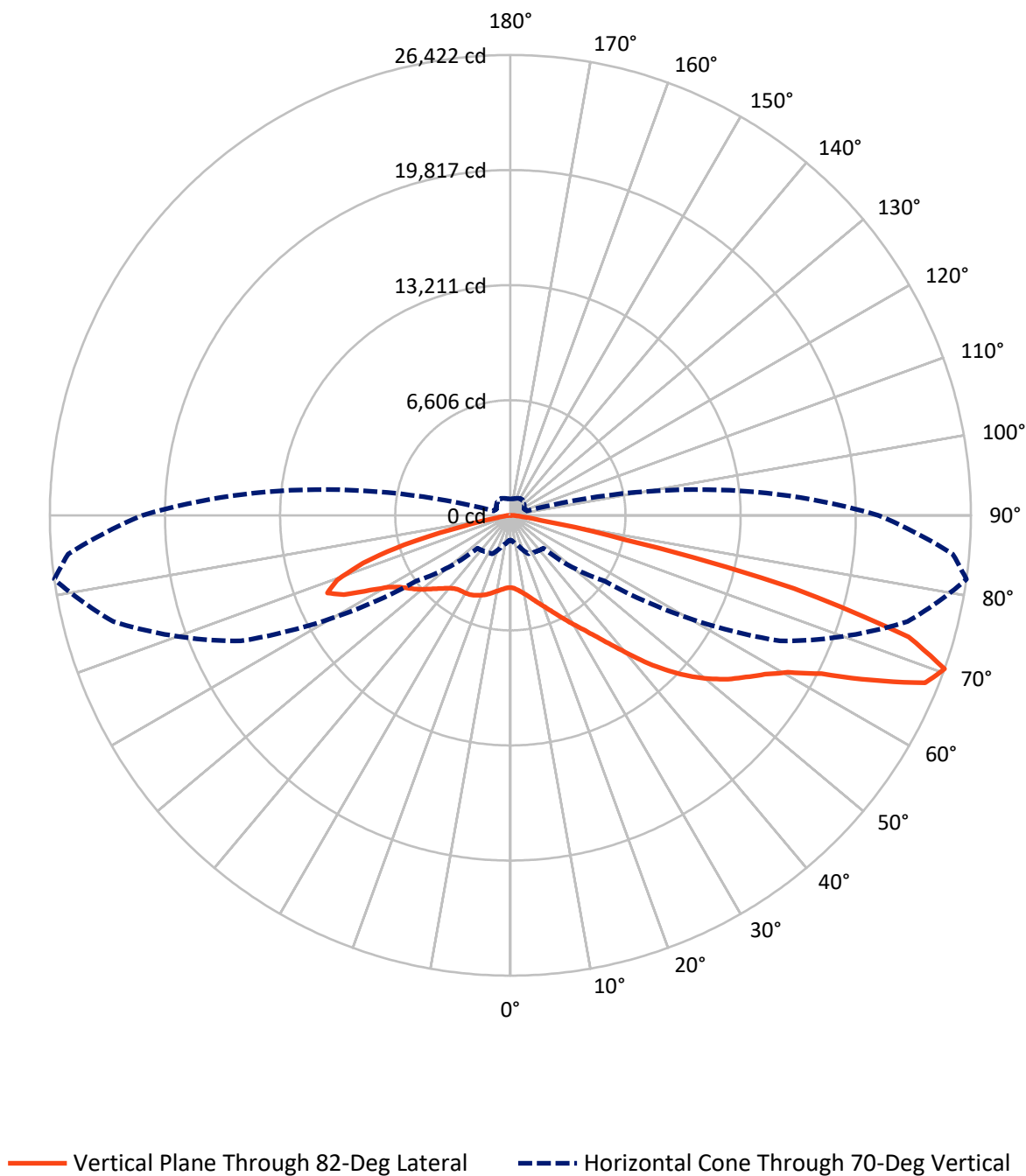
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6970.4	0.0	6970.4
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	21304.2	0.0	21304.2
	% Fixture	75.3	0.0	75.3
Total	Lumens	28274.6	0.0	28274.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	391.4	1.4
10°-20°	1124.5	4.0
20°-30°	1881.2	6.7
30°-40°	2938.9	10.4
40°-50°	4680.6	16.6
50°-60°	6513.6	23.0
60°-70°	6813.5	24.1
70°-80°	3561.1	12.6
80°-90°	369.8	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°	28274.6	100.0
0°-180°	28274.6	100.0

Coefficient of Utilization



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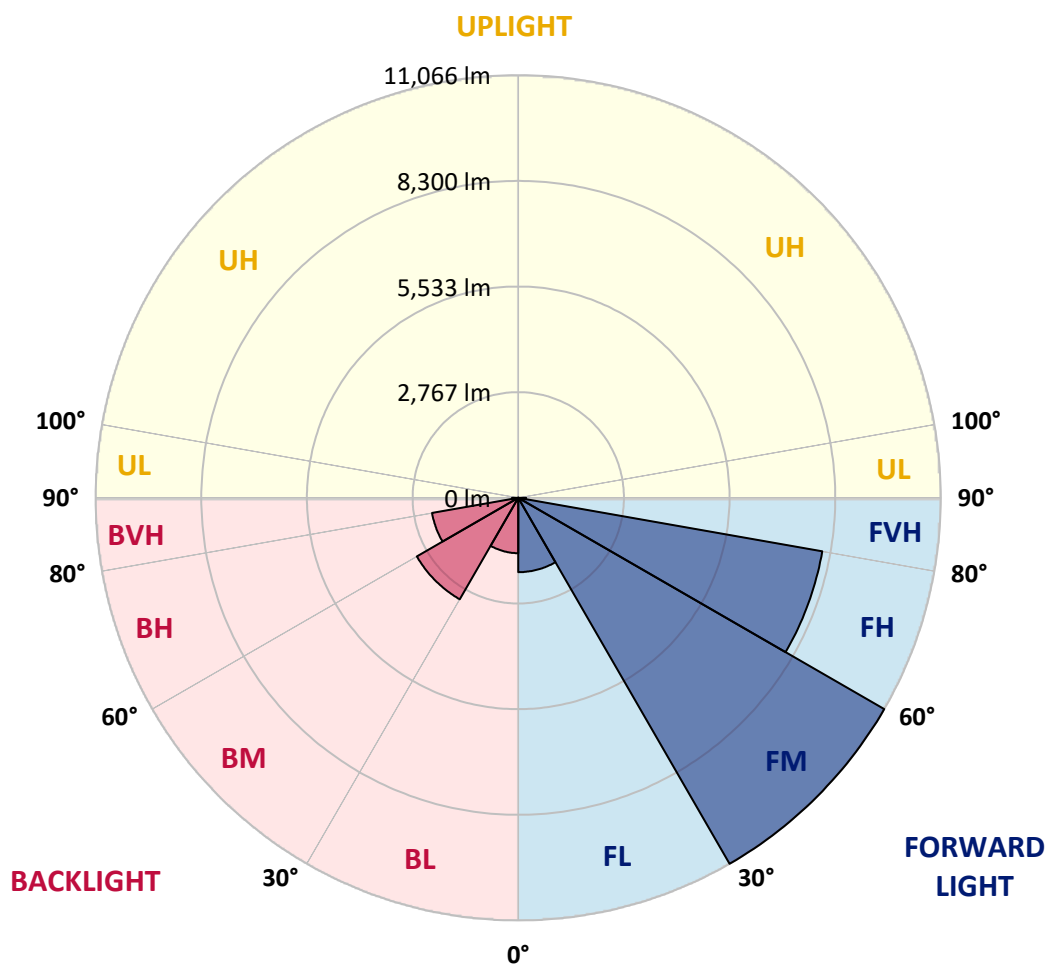
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1947.0	6.9			
FM	(30°-60°)	11066.4	39.1			
FH	(60°-80°)	8083.8	28.6			G4/12000
FVH	(80°-90°)	207.0	0.7			G2/225
BL	(0°-30°)	1450.1	5.1	B3/2500		
BM	(30°-60°)	3066.7	10.8	B3/5000		
BH	(60°-80°)	2290.8	8.1	B3/2500		G3/2500
BVH	(80°-90°)	162.8	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°	4145.4	4145.4	4145.4	4145.4	4145.4	4145.4	4145.4	4145.4	4145.4	4145.4	4145.4
2.5°	4244.4	4268.4	4260.9	4253.4	4253.4	4242.9	4241.4	4226.4	4214.4	4194.9	4190.4
5°	4298.4	4324.0	4321.0	4326.9	4346.4	4350.9	4355.4	4346.4	4322.4	4298.4	4288.0
7.5°	4250.5	4279.0	4288.0	4324.0	4383.9	4437.9	4478.5	4495.0	4472.5	4437.9	4421.4
10°	4088.4	4119.9	4151.5	4236.9	4343.4	4470.9	4579.0	4643.6	4639.0	4606.0	4577.5
12.5°	3759.8	3792.8	3860.4	4026.9	4222.0	4447.0	4648.1	4783.1	4829.6	4805.6	4756.0
15°	3497.3	3525.8	3576.7	3747.8	4001.4	4343.4	4673.5	4936.1	5054.6	5041.2	4981.1
17.5°	3489.8	3501.8	3533.3	3614.3	3809.3	4181.4	4646.5	5086.2	5312.7	5311.1	5236.1
20°	3621.8	3626.3	3644.3	3660.8	3771.8	4058.4	4577.5	5210.7	5602.2	5602.2	5521.3
22.5°	3804.8	3801.8	3819.9	3804.8	3858.8	4047.9	4534.0	5320.2	5924.8	5948.8	5846.8
25°	4079.4	4064.4	4059.9	4025.4	4035.9	4145.4	4582.1	5444.7	6307.4	6356.9	6229.3
27.5°	4445.5	4421.4	4404.9	4325.5	4298.4	4346.4	4729.0	5594.8	6733.5	6819.0	6657.0
30°	4922.6	4879.1	4855.1	4717.0	4619.5	4627.1	4951.1	5794.3	7179.1	7317.1	7111.6
32.5°	5573.7	5506.2	5441.7	5215.2	5036.6	4978.1	5237.6	6070.4	7662.2	7882.8	7618.7
35°	6302.9	6248.9	6179.8	5830.3	5555.7	5420.7	5624.8	6456.0	8227.8	8577.4	8233.8
37.5°	7005.1	6958.5	6991.5	6520.4	6166.4	5969.8	6131.9	6973.6	8925.5	9441.6	9005.0
40°	7731.2	7695.2	7699.7	7249.6	6837.1	6616.5	6747.0	7623.1	9725.1	10469.3	9932.1
42.5°	8520.4	8493.4	8403.4	8004.2	7540.6	7335.1	7455.1	8373.3	10583.3	11639.6	10949.5
45°	9404.1	9387.6	9303.5	8846.0	8314.8	8083.8	8245.8	9201.5	11446.1	12740.9	11971.2
47.5°	10167.7	10181.2	10170.8	9785.2	9234.5	8895.5	9089.0	10065.7	12248.7	13776.0	12950.9
50°	10535.4	10605.9	10709.4	10589.4	10247.2	9902.2	9939.7	10900.0	13013.9	14746.8	13890.1
52.5°	10343.3	10476.8	10758.9	10950.9	11082.9	11011.0	10910.4	11728.0	13734.1	15622.9	14778.2
55°	9627.6	9815.2	10283.3	10746.8	11420.6	11944.1	12076.1	12646.2	14436.2	16394.2	15618.4
57.5°	8323.8	8628.4	9048.5	9986.2	11120.4	12395.7	13435.5	13920.1	15180.4	17217.7	16497.7
60°	6088.3	6496.4	7018.6	8413.8	10070.2	12154.1	14592.2	15876.5	16238.0	18284.6	17642.4
62.5°	3896.3	4148.4	4628.5	5942.8	7846.7	10916.5	14946.3	18322.1	18031.0	20033.9	19358.8
65°	2667.6	2829.6	3269.2	4007.3	5072.6	8125.8	13998.1	20155.4	20878.6	22806.6	22293.4
67.5°	1938.4	2061.5	2436.5	3083.2	3305.2	4808.6	10862.4	20071.4	23646.7	25663.1	24865.0
70°	1413.3	1500.3	1815.4	2436.5	2543.0	2675.0	6580.5	17061.7	23586.7	26422.3	25466.6
72.5°	1047.2	1107.2	1318.8	1890.4	2058.4	1806.4	3257.2	12400.2	20267.9	23898.8	23132.1
75°	757.7	802.7	958.7	1446.3	1647.4	1375.8	1624.8	7246.6	14137.6	16811.2	16946.2
77.5°	579.1	613.7	715.7	1059.2	1318.8	1032.3	1008.2	3333.7	6703.5	6736.5	7114.5
80°	465.1	487.6	543.1	745.7	1011.3	772.6	657.1	1345.8	2118.5	1792.9	1881.4
82.5°	342.0	379.6	459.1	523.6	723.1	532.6	400.6	679.7	805.6	693.1	699.2
85°	195.1	220.6	277.6	375.0	462.1	325.5	229.6	301.6	375.0	307.6	274.6
87.5°	69.0	90.0	97.5	147.0	201.0	135.0	88.6	87.0	123.0	91.5	76.6
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°	4145.4	4145.4	4145.4	4145.4	4145.4	4145.4	4145.4	4145.4	4145.4	4145.4	4145.4
2.5°	4175.4	4168.0	4137.9	4097.4	4055.4	4014.9	4001.4	3972.9	3953.3	3942.9	3954.9
5°	4259.4	4235.4	4164.9	4074.9	3980.4	3878.4	3806.3	3740.3	3692.4	3647.3	3665.3
7.5°	4379.4	4337.5	4215.9	4058.4	3890.4	3720.9	3594.8	3498.7	3434.3	3392.2	3401.3
10°	4519.0	4454.4	4268.4	4032.9	3773.3	3530.3	3381.8	3299.3	3258.7	3236.2	3242.2
12.5°	4679.5	4588.0	4322.4	3974.3	3594.8	3317.2	3215.2	3191.2	3192.7	3194.2	3197.2
15°	4877.6	4750.1	4366.0	3846.8	3362.2	3153.7	3135.7	3174.7	3215.2	3234.7	3233.3
17.5°	5101.1	4921.1	4373.5	3636.8	3134.1	3048.7	3105.6	3189.7	3251.2	3278.3	3284.2
20°	5341.2	5095.2	4319.5	3339.8	2946.7	2963.2	3065.2	3173.2	3240.7	3275.2	3284.2
22.5°	5615.8	5281.2	4190.4	3027.6	2793.6	2870.1	2990.1	3095.2	3165.7	3200.3	3209.2
25°	5929.3	5489.7	3987.9	2765.1	2661.6	2765.1	2885.2	2972.2	3029.2	3060.6	3069.7
27.5°	6277.4	5707.3	3717.8	2556.6	2546.1	2657.1	2756.1	2823.7	2853.6	2877.6	2886.6
30°	6626.9	5905.3	3390.7	2399.0	2445.5	2550.6	2621.0	2651.1	2660.1	2664.6	2675.0
32.5°	7005.1	6076.3	3047.2	2268.5	2349.5	2447.1	2489.0	2502.5	2460.5	2432.0	2441.0
35°	7462.6	6259.4	2711.1	2165.0	2255.0	2339.0	2352.5	2340.5	2291.0	2232.4	2235.5
37.5°	8028.3	6487.4	2442.6	2091.4	2166.4	2222.0	2205.5	2202.5	2207.0	2137.9	2142.5
40°	8721.4	6784.5	2246.0	2034.4	2094.5	2106.5	2059.9	2085.5	2108.0	2003.0	2005.9
42.5°	9491.1	7143.1	2121.4	1995.5	2034.4	2005.9	1934.0	1962.5	1959.4	1821.4	1819.9
45°	10275.7	7533.1	2078.0	1967.0	1979.0	1921.9	1842.4	1849.9	1786.9	1662.3	1666.9
47.5°	11056.0	7951.7	2104.9	1942.9	1909.9	1845.4	1783.9	1750.9	1657.8	1564.9	1564.9
50°	11821.1	8391.4	2204.0	1894.9	1815.4	1777.9	1732.9	1674.3	1575.3	1495.8	1489.8
52.5°	12530.7	8834.0	2315.0	1815.4	1696.9	1719.3	1690.8	1623.4	1525.8	1444.8	1446.3
55°	13202.9	9276.6	2358.5	1705.9	1585.9	1668.4	1651.9	1527.4	1410.3	1344.3	1338.3
57.5°	13935.1	9809.1	2310.6	1566.3	1495.8	1609.9	1546.8	1408.8	1341.3	1291.8	1287.3
60°	14949.3	10644.8	2207.0	1393.8	1410.3	1522.8	1414.8	1357.8	1284.3	1228.8	1225.8
62.5°	16634.2	12203.6	2040.5	1222.7	1309.7	1393.8	1351.8	1294.8	1219.8	1165.7	1165.7
65°	19124.8	14370.2	1726.9	1089.3	1197.3	1267.8	1284.3	1227.2	1149.2	1092.2	1095.2
67.5°	21225.2	15729.4	1306.8	978.3	1081.8	1165.7	1212.3	1156.7	1074.2	1018.7	1020.2
70°	21109.7	14742.3	997.7	868.7	979.7	1065.3	1125.2	1081.8	993.2	940.7	945.3
72.5°	18749.6	12332.7	807.2	757.7	876.2	960.2	1032.3	999.2	909.2	858.2	858.2
75°	13774.6	8754.4	645.1	645.1	747.1	850.6	930.2	909.2	826.7	790.7	780.1
77.5°	5806.3	3672.8	505.6	535.7	621.2	730.6	829.6	837.2	765.2	810.2	735.1
80°	1543.9	1012.7	385.6	421.6	487.6	603.1	721.7	718.6	640.6	598.6	556.6
82.5°	588.1	399.1	274.6	297.0	352.6	462.1	571.6	589.6	511.6	442.6	442.6
85°	226.5	171.1	169.5	178.6	205.5	306.1	432.1	447.1	385.6	327.1	337.5
87.5°	58.5	51.0	63.0	60.0	94.5	163.5	247.5	256.6	235.5	136.5	195.1
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)