

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: P966835

Luminaire Tested: **NAV-SB4C-830-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966835
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-830-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27391.1 lumens
Efficiency: N/A
Efficacy: 136.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

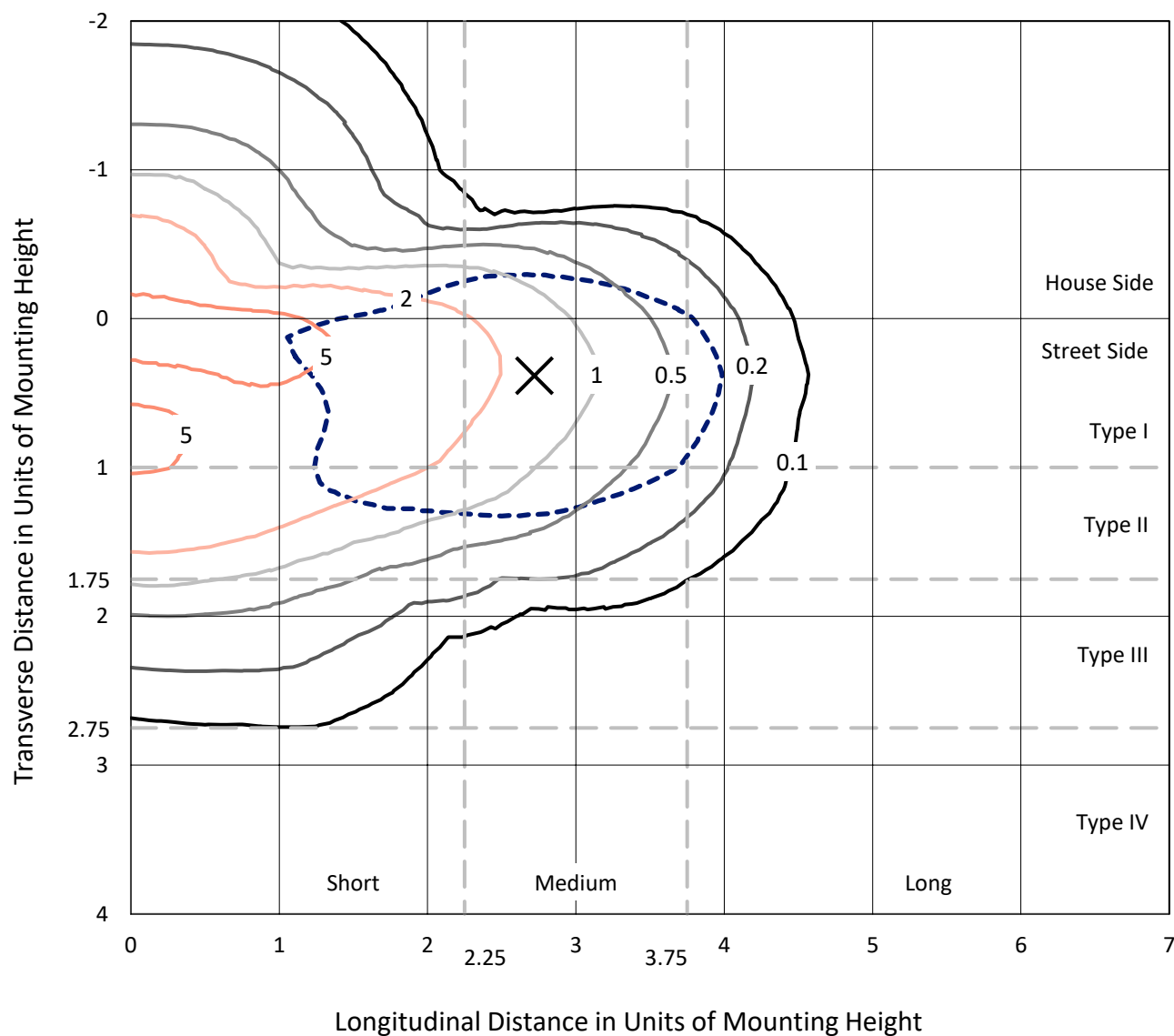
Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

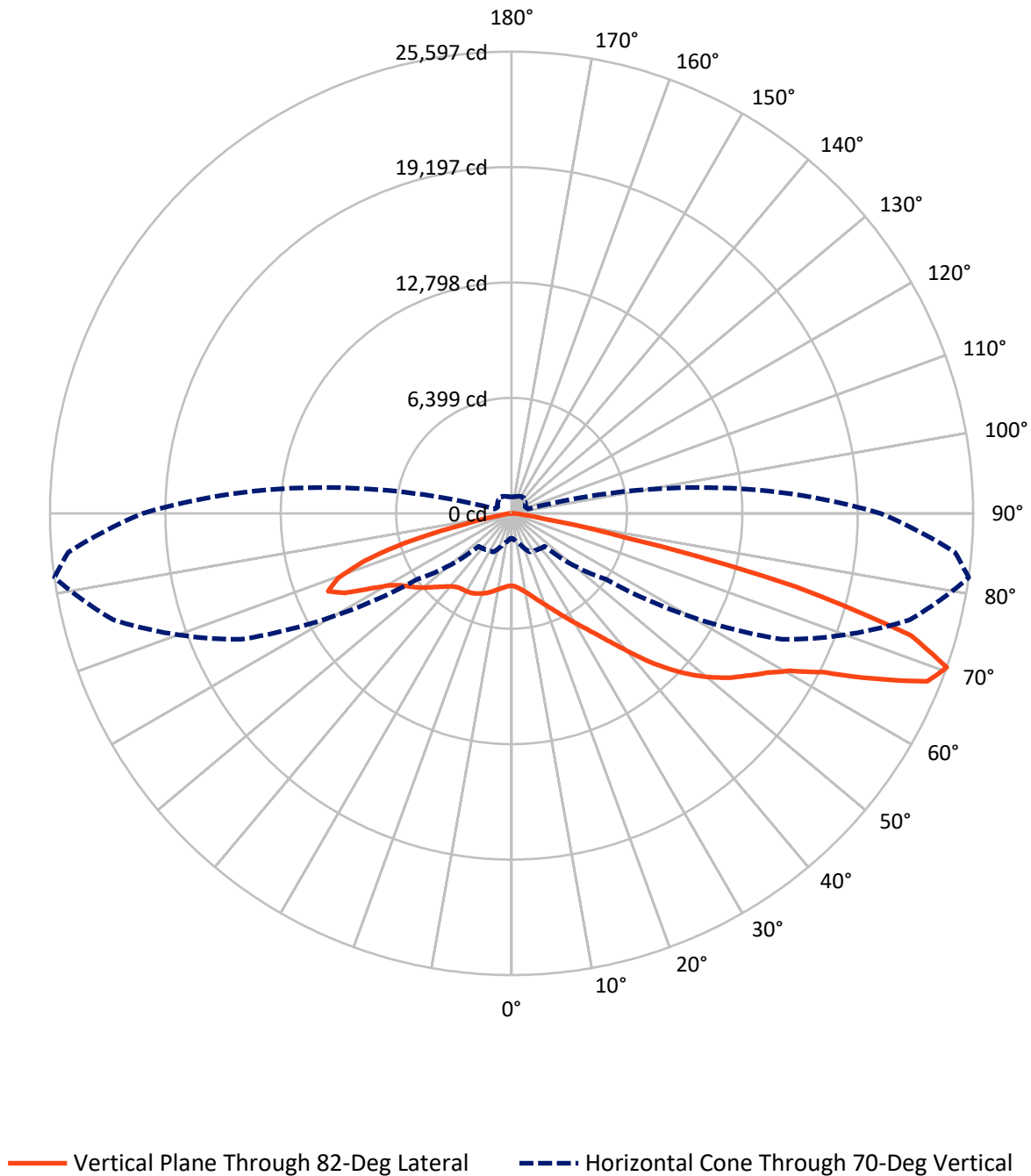
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 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	6752.6	0.0	6752.6
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	20638.5	0.0	20638.5
	% Fixture	75.3	0.0	75.3
Total	Lumens	27391.1	0.0	27391.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	379.2	1.4
10°-20°	1089.4	4.0
20°-30°	1822.4	6.7
30°-40°	2847.1	10.4
40°-50°	4534.3	16.6
50°-60°	6310.1	23.0
60°-70°	6600.6	24.1
70°-80°	3449.8	12.6
80°-90°	358.2	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°	27391.1	100.0
0°-180°	27391.1	100.0

Coefficient of Utilization



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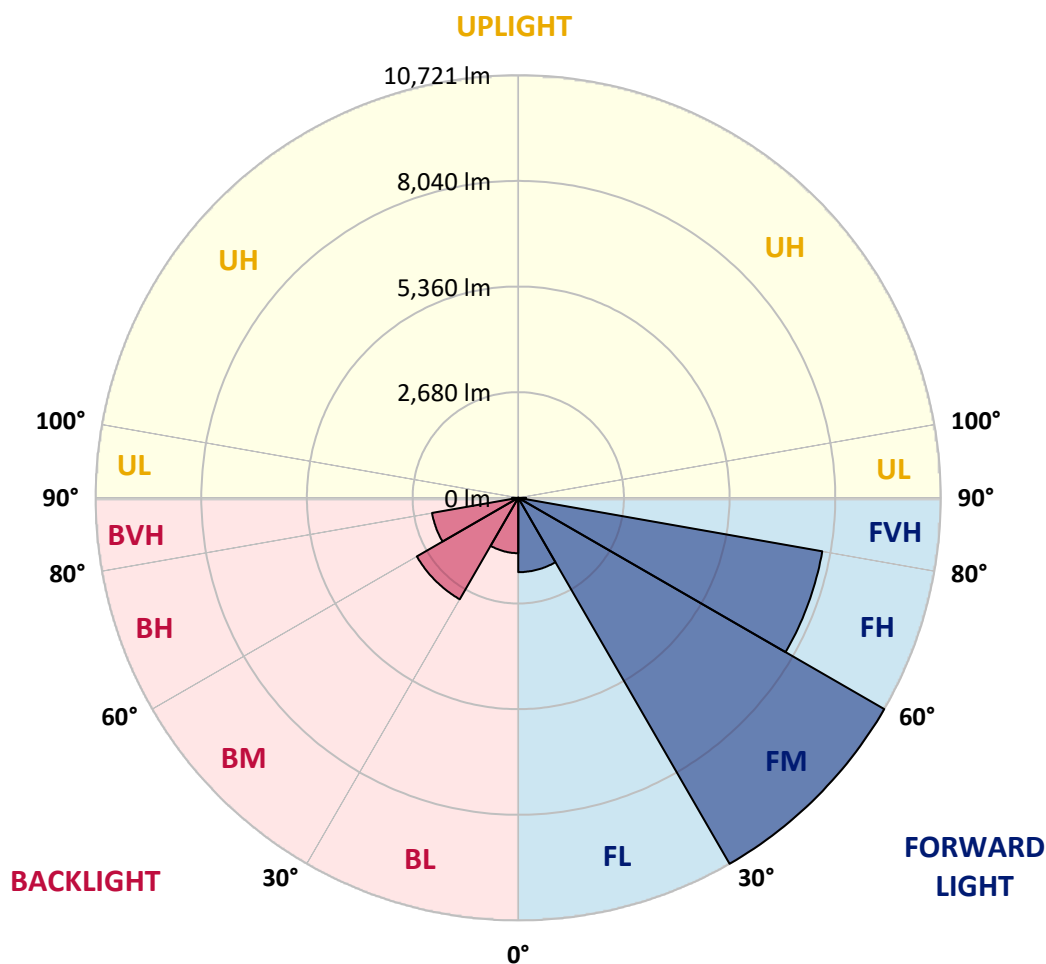
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1886.2	6.9			
FM	(30°-60°)	10720.6	39.1			
FH	(60°-80°)	7831.2	28.6			G4/12000
FVH	(80°-90°)	200.5	0.7			G2/225
BL	(0°-30°)	1404.8	5.1	B3/2500		
BM	(30°-60°)	2970.9	10.8	B3/5000		
BH	(60°-80°)	2219.2	8.1	B3/2500		G3/2500
BVH	(80°-90°)	157.7	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°	4015.8	4015.8	4015.8	4015.8	4015.8	4015.8	4015.8	4015.8	4015.8	4015.8	4015.8
2.5°	4111.8	4135.1	4127.8	4120.5	4120.5	4110.4	4108.9	4094.4	4082.8	4063.8	4059.5
5°	4164.2	4188.9	4185.9	4191.7	4210.6	4215.0	4219.3	4210.6	4187.3	4164.2	4153.9
7.5°	4117.6	4145.2	4153.9	4188.9	4247.0	4299.3	4338.5	4354.5	4332.7	4299.3	4283.3
10°	3960.6	3991.1	4021.7	4104.5	4207.7	4331.2	4435.9	4498.4	4494.0	4462.1	4434.5
12.5°	3642.3	3674.3	3739.7	3901.0	4090.0	4308.0	4502.8	4633.6	4678.6	4655.3	4607.5
15°	3388.0	3415.6	3465.0	3630.8	3876.3	4207.7	4527.5	4781.8	4896.6	4883.6	4825.5
17.5°	3380.8	3392.3	3422.9	3501.4	3690.3	4050.8	4501.3	4927.2	5146.6	5145.2	5072.5
20°	3508.6	3513.0	3530.4	3546.4	3653.9	3931.6	4434.5	5047.8	5427.2	5427.2	5348.7
22.5°	3685.9	3683.0	3700.5	3685.9	3738.3	3921.4	4392.3	5153.9	5739.7	5763.0	5664.0
25°	3951.9	3937.4	3933.0	3899.6	3909.8	4015.8	4438.9	5274.5	6110.3	6158.3	6034.7
27.5°	4306.5	4283.3	4267.3	4190.3	4164.2	4210.6	4581.2	5419.9	6523.1	6605.9	6449.0
30°	4768.7	4726.6	4703.3	4569.7	4475.2	4482.4	4796.4	5613.2	6954.7	7088.5	6889.3
32.5°	5399.6	5334.1	5271.7	5052.2	4879.2	4822.5	5074.0	5880.6	7422.7	7636.5	7380.6
35°	6105.9	6053.6	5986.7	5648.1	5382.1	5251.3	5449.0	6254.1	7970.7	8309.4	7976.6
37.5°	6786.1	6741.1	6773.1	6316.7	5973.7	5783.3	5940.3	6755.7	8646.6	9146.6	8723.6
40°	7489.6	7454.7	7459.1	7023.1	6623.3	6409.7	6536.1	7384.9	9421.3	10142.2	9621.8
42.5°	8254.1	8228.0	8140.8	7754.1	7305.1	7105.9	7222.2	8111.6	10252.7	11275.8	10607.2
45°	9110.2	9094.2	9012.8	8569.5	8055.0	7831.2	7988.1	8914.0	11088.3	12342.6	11597.1
47.5°	9850.0	9863.1	9852.9	9479.4	8946.0	8617.5	8805.0	9751.1	11865.9	13345.5	12546.2
50°	10206.1	10274.4	10374.7	10258.4	9927.0	9592.8	9629.1	10559.2	12607.2	14285.9	13456.0
52.5°	10020.1	10149.4	10422.7	10608.7	10736.6	10666.9	10569.5	11361.6	13304.8	15134.7	14316.5
55°	9326.8	9508.4	9962.0	10411.0	11063.6	11570.9	11698.8	12251.1	13985.1	15881.9	15130.3
57.5°	8063.7	8358.8	8765.7	9674.2	10773.0	12008.4	13015.7	13485.1	14706.0	16679.7	15982.1
60°	5898.1	6293.4	6799.2	8150.9	9755.5	11774.4	14136.2	15380.3	15730.7	17713.1	17091.1
62.5°	3774.6	4018.8	4483.9	5757.1	7601.5	10575.2	14479.3	17749.5	17467.5	19407.9	18753.8
65°	2584.2	2741.2	3167.0	3882.2	4914.1	7871.9	13560.6	19525.6	20226.1	22093.9	21596.7
67.5°	1877.9	1997.0	2360.4	2986.8	3201.9	4658.3	10523.0	19444.2	22907.8	24861.2	24088.0
70°	1369.2	1453.4	1758.7	2360.4	2463.6	2591.5	6374.8	16528.6	22849.6	25596.6	24670.8
72.5°	1014.5	1072.7	1277.6	1831.4	1994.1	1750.0	3155.5	12012.7	19634.6	23152.0	22409.3
75°	734.0	777.6	928.8	1401.1	1595.9	1332.8	1574.1	7020.1	13695.8	16285.9	16416.7
77.5°	561.0	594.5	693.3	1026.1	1277.6	1000.0	976.7	3229.6	6494.0	6526.0	6892.2
80°	450.6	472.3	526.1	722.3	979.6	748.6	636.6	1303.7	2052.3	1736.9	1822.7
82.5°	331.4	367.8	444.7	507.3	700.6	516.0	388.1	658.5	780.5	671.5	677.3
85°	188.9	213.6	268.9	363.4	447.6	315.4	222.4	292.1	363.4	298.0	266.0
87.5°	66.8	87.2	94.5	142.5	194.7	130.8	85.8	84.3	119.2	88.7	74.1
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°	4015.8	4015.8	4015.8	4015.8	4015.8	4015.8	4015.8	4015.8	4015.8	4015.8	4015.8
2.5°	4045.0	4037.7	4008.6	3969.4	3928.6	3889.5	3876.3	3848.8	3829.8	3819.7	3831.2
5°	4126.3	4103.1	4034.8	3947.6	3855.9	3757.1	3687.4	3623.5	3576.9	3533.4	3550.8
7.5°	4242.6	4201.9	4084.2	3931.6	3768.8	3604.5	3482.4	3389.5	3326.9	3286.3	3295.0
10°	4377.8	4315.2	4135.1	3906.9	3655.5	3419.9	3276.1	3196.2	3156.9	3135.1	3140.9
12.5°	4533.3	4444.6	4187.3	3850.2	3482.4	3213.6	3114.8	3091.5	3092.9	3094.4	3097.3
15°	4725.1	4601.6	4229.6	3726.6	3257.1	3055.1	3037.7	3075.5	3114.8	3133.6	3132.2
17.5°	4941.7	4767.3	4236.8	3523.1	3036.3	2953.4	3008.7	3090.1	3149.6	3175.8	3181.6
20°	5174.3	4935.9	4184.5	3235.4	2854.5	2870.5	2969.4	3074.1	3139.5	3172.9	3181.6
22.5°	5440.3	5116.1	4059.5	2933.0	2706.3	2780.4	2896.8	2998.4	3066.8	3100.2	3108.9
25°	5744.0	5318.2	3863.2	2678.7	2578.4	2678.7	2795.0	2879.3	2934.5	2965.0	2973.7
27.5°	6081.2	5529.0	3601.6	2476.7	2466.5	2574.1	2670.0	2735.4	2764.4	2787.7	2796.4
30°	6419.9	5720.7	3284.8	2324.1	2369.1	2470.9	2539.1	2568.2	2577.0	2581.4	2591.5
32.5°	6786.1	5886.5	2952.0	2197.6	2276.1	2370.6	2411.3	2424.3	2383.6	2356.1	2364.8
35°	7229.4	6063.8	2626.4	2097.4	2184.5	2266.0	2279.0	2267.4	2219.4	2162.8	2165.6
37.5°	7777.4	6284.7	2366.2	2026.1	2098.8	2152.6	2136.6	2133.6	2138.0	2071.1	2075.5
40°	8448.9	6572.5	2175.8	1970.9	2029.0	2040.7	1995.6	2020.3	2042.1	1940.3	1943.3
42.5°	9194.5	6919.9	2055.1	1933.0	1970.9	1943.3	1873.5	1901.1	1898.2	1764.4	1763.0
45°	9954.7	7297.8	2013.0	1905.5	1917.1	1861.9	1784.8	1792.1	1731.0	1610.4	1614.8
47.5°	10710.4	7703.3	2039.1	1882.2	1850.2	1787.7	1728.2	1696.2	1606.1	1516.0	1516.0
50°	11451.7	8129.2	2135.1	1835.7	1758.7	1722.3	1678.7	1622.1	1526.1	1449.0	1443.3
52.5°	12139.2	8557.9	2242.7	1758.7	1643.9	1665.6	1638.1	1572.7	1478.2	1399.6	1401.1
55°	12790.4	8986.7	2284.8	1652.6	1536.3	1616.2	1600.2	1479.6	1366.2	1302.3	1296.5
57.5°	13499.7	9502.7	2238.3	1517.4	1449.0	1559.5	1498.6	1364.8	1299.4	1251.4	1247.0
60°	14482.1	10312.2	2138.0	1350.2	1366.2	1475.3	1370.6	1315.4	1244.1	1190.3	1187.5
62.5°	16114.3	11822.3	1976.7	1184.6	1268.8	1350.2	1309.5	1254.3	1181.6	1129.3	1129.3
65°	18527.1	13921.1	1672.9	1055.2	1159.9	1228.2	1244.1	1188.9	1113.4	1058.1	1061.0
67.5°	20561.9	15238.0	1266.0	947.6	1048.0	1129.3	1174.3	1120.6	1040.7	986.9	988.3
70°	20450.0	14281.5	966.6	841.5	949.1	1032.0	1090.1	1048.0	962.2	911.3	915.6
72.5°	18163.7	11947.3	782.0	734.0	848.8	930.2	1000.0	968.0	880.8	831.4	831.4
75°	13344.1	8480.8	624.9	624.9	723.9	824.1	901.2	880.8	800.8	766.0	755.8
77.5°	5624.8	3558.1	489.8	518.9	601.8	707.9	803.8	811.0	741.3	784.8	712.2
80°	1495.6	981.0	373.5	408.5	472.3	584.2	699.2	696.2	620.6	579.9	539.3
82.5°	569.8	386.6	266.0	287.8	341.5	447.6	553.8	571.2	495.6	428.8	428.8
85°	219.5	165.7	164.2	172.9	199.2	296.5	418.6	433.2	373.5	316.8	327.0
87.5°	56.7	49.4	61.1	58.1	91.5	158.5	239.8	248.6	228.2	132.2	188.9
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)