

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: P966843

Luminaire Tested: **NAV-SB4C-830-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966843
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-830-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27589.9 lumens
Efficiency: N/A
Efficacy: 137.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
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



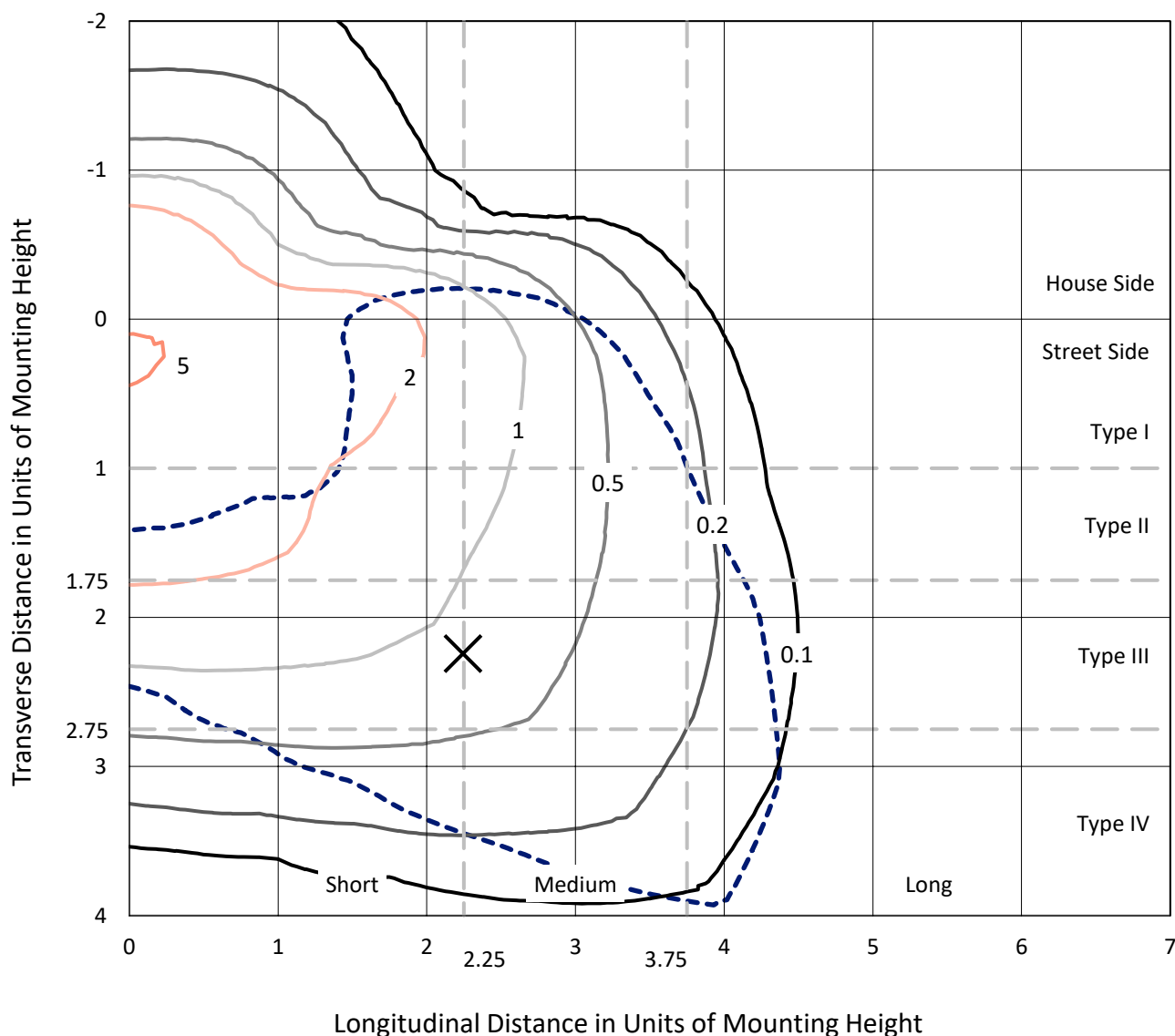
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

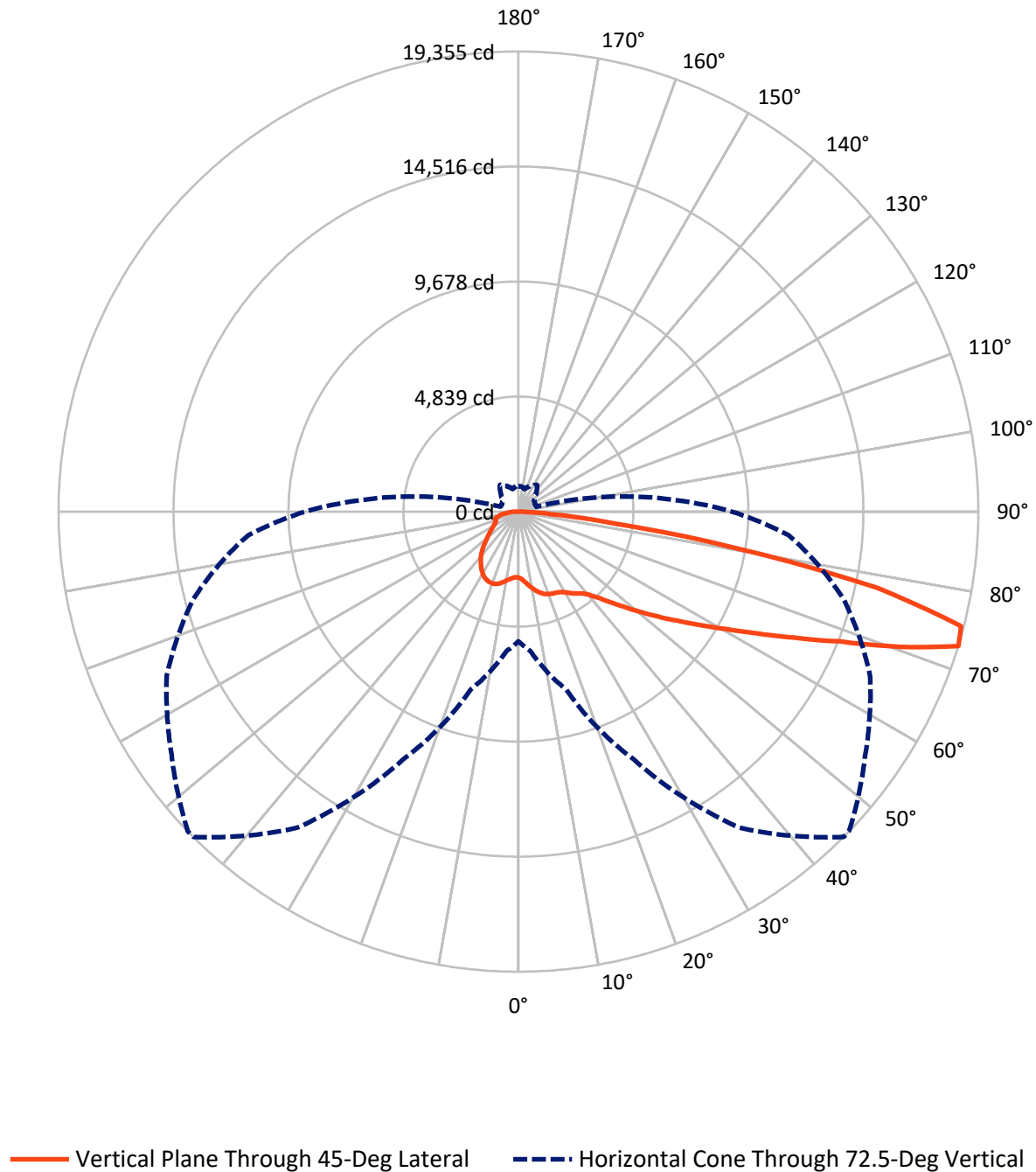


Based on 25 foot mounting height. Maximum calculated value = 5.5 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6237.1	0.0	6237.1
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	21352.8	0.0	21352.8
	% Fixture	77.4	0.0	77.4
Total	Lumens	27589.9	0.0	27589.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.3	1.0
10°-20°	944.5	3.4
20°-30°	1643.0	6.0
30°-40°	2355.4	8.5
40°-50°	3316.5	12.0
50°-60°	5079.9	18.4
60°-70°	7358.9	26.7
70°-80°	5876.6	21.3
80°-90°	731.9	2.7
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°	27589.9	100.0
0°-180°	27589.9	100.0

Coefficient of Utilization



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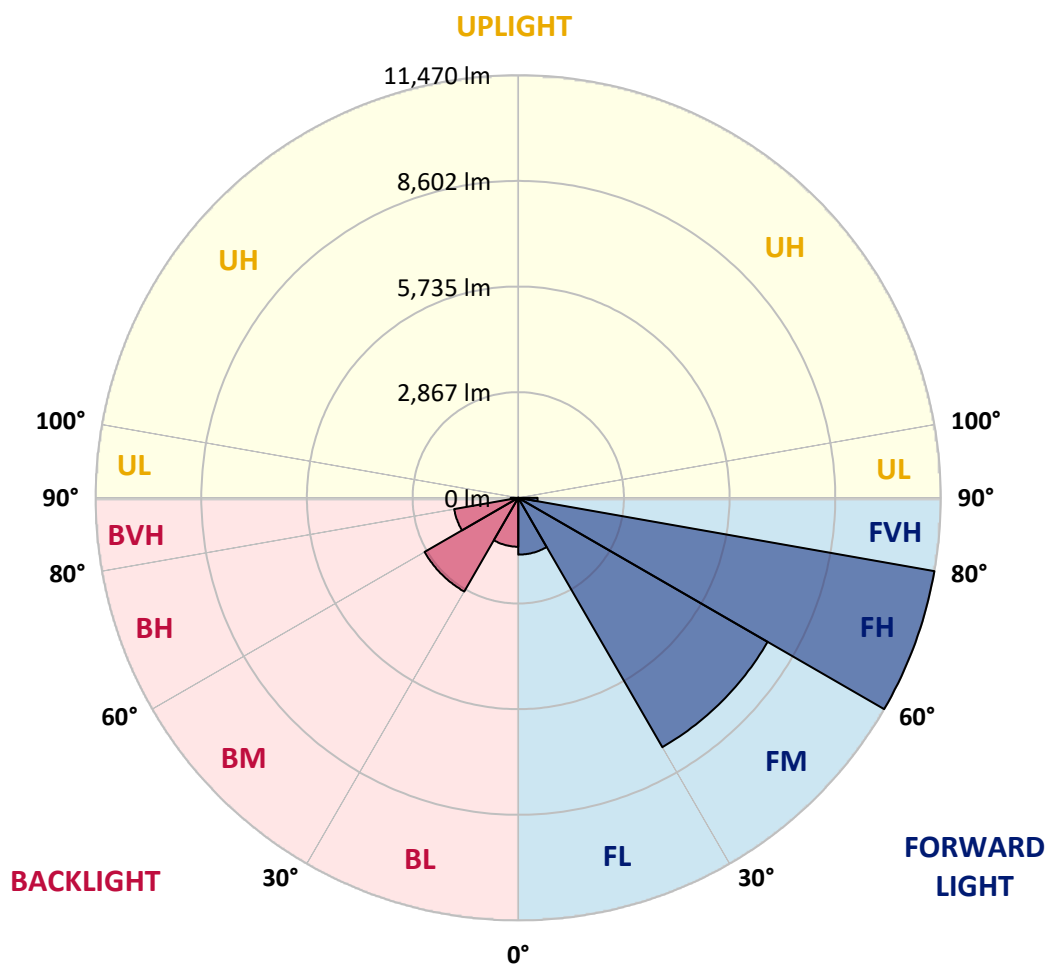
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1542.9	5.6			
FM	(30°-60°)	7814.9	28.3			
FH	(60°-80°)	11469.9	41.6			G4/12000
FVH	(80°-90°)	525.1	1.9			G4/750
BL	(0°-30°)	1327.9	4.8	B3/2500		
BM	(30°-60°)	2936.8	10.6	B3/5000		
BH	(60°-80°)	1765.6	6.4	B3/2500		G3/2500
BVH	(80°-90°)	206.8	0.7			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 IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3
2.5°	2892.2	2911.2	2893.8	2877.8	2870.5	2851.5	2850.1	2838.5	2831.3	2810.9	2805.1
5°	3094.3	3119.1	3090.0	3058.0	3028.9	2982.4	2976.6	2943.2	2905.4	2861.8	2837.1
7.5°	3322.5	3344.3	3310.9	3262.9	3212.0	3135.0	3133.5	3072.5	3012.9	2938.8	2896.6
10°	3521.6	3550.7	3505.6	3440.2	3376.2	3289.1	3278.9	3209.2	3133.5	3037.6	2973.7
12.5°	3697.5	3717.9	3674.2	3594.3	3520.2	3432.9	3419.9	3342.8	3258.6	3149.5	3068.1
15°	3837.0	3863.1	3805.0	3719.3	3640.8	3555.0	3543.4	3473.6	3389.4	3274.6	3169.9
17.5°	3928.6	3950.3	3890.8	3794.9	3719.3	3648.1	3639.4	3581.2	3507.0	3390.8	3278.9
20°	3963.5	3986.7	3924.2	3826.8	3757.0	3701.9	3697.5	3655.4	3604.5	3498.3	3385.0
22.5°	3998.3	4020.2	3938.8	3837.0	3776.0	3741.0	3739.6	3712.0	3691.6	3604.5	3494.0
25°	4139.4	4145.1	4036.1	3889.4	3802.1	3771.6	3770.2	3768.7	3777.4	3709.1	3611.7
27.5°	4261.4	4260.0	4166.9	4028.9	3893.7	3829.7	3828.3	3842.8	3870.4	3813.7	3733.8
30°	4440.2	4424.2	4313.7	4169.8	4046.3	3947.5	3938.8	3925.6	3947.5	3902.4	3855.9
32.5°	4819.5	4768.6	4589.8	4334.1	4172.8	4097.1	4085.5	4004.2	4012.9	3985.3	3962.0
35°	5363.1	5296.3	5057.9	4645.1	4329.7	4222.2	4216.3	4113.1	4095.7	4071.0	4079.7
37.5°	6009.9	5927.1	5649.4	5095.7	4600.1	4367.5	4358.8	4265.7	4194.5	4168.4	4217.8
40°	6659.5	6554.9	6325.3	5645.1	4998.3	4610.2	4582.6	4441.6	4360.2	4316.7	4421.2
42.5°	7290.3	7203.1	7006.9	6261.3	5489.6	4964.9	4903.8	4662.5	4601.5	4560.8	4749.7
45°	7848.4	7769.9	7626.1	6919.7	6065.1	5447.4	5387.8	4993.9	4975.0	4975.0	5248.3
47.5°	8301.9	8284.5	8131.8	7591.2	6743.9	5996.8	5893.5	5454.6	5505.5	5584.0	5956.1
50°	8804.8	8756.8	8594.0	8252.5	7541.7	6626.1	6541.9	6020.0	6210.5	6425.5	6979.3
52.5°	9266.9	9293.2	9111.4	8941.4	8442.9	7328.1	7179.8	6687.2	7098.4	7454.5	8178.4
55°	9742.2	9743.6	9692.8	9669.5	9387.6	8104.3	7941.5	7489.5	8143.5	8585.3	9576.6
57.5°	10188.4	10191.4	10266.9	10471.8	10483.5	8999.5	8815.0	8474.8	9304.7	9755.3	11018.3
60°	10586.7	10607.0	10813.4	11293.0	11447.1	10025.6	9851.3	9639.0	10505.2	10958.7	12534.2
62.5°	10720.4	10794.5	11253.8	11935.4	12399.1	11284.3	11112.8	10986.4	11766.8	12188.3	13801.6
65°	10493.6	10663.7	11551.7	12465.9	13378.7	12779.9	12609.9	12471.8	13077.8	13474.5	14842.3
67.5°	9937.0	10156.4	11534.3	13022.6	14567.6	14579.2	14420.7	14096.6	14483.2	14635.9	15180.9
70°	8470.5	8799.0	10518.3	13230.4	15932.3	17039.8	16887.2	16052.9	15885.8	15147.4	14227.5
72.5°	5457.6	5899.4	7745.2	11519.8	16236.1	19355.1	19346.4	17818.8	16329.1	14153.3	11410.7
75°	1991.2	2261.6	3598.7	7230.8	13628.7	19237.4	19294.1	17516.5	14906.2	10932.5	7108.7
77.5°	725.3	793.6	1174.3	2778.9	8381.8	15435.3	15552.9	14003.7	10609.9	5486.6	2816.7
80°	380.8	418.6	601.7	1078.4	3591.4	9166.7	9351.3	8322.3	4986.6	1652.5	844.4
82.5°	210.7	228.2	337.2	585.7	1617.7	3919.8	4030.3	3287.6	1754.3	700.6	348.8
85°	113.4	120.6	158.5	319.8	790.7	1358.9	1389.5	982.5	699.0	411.3	168.6
87.5°	33.4	40.7	52.3	101.8	309.5	305.2	312.5	194.7	276.1	207.9	55.2
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°	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3	2783.3
2.5°	2796.4	2792.0	2776.0	2768.7	2760.0	2758.6	2765.9	2767.3	2768.7	2770.2	2776.0
5°	2822.5	2808.0	2793.4	2784.7	2787.7	2789.1	2803.7	2813.8	2821.1	2826.8	2829.8
7.5°	2873.4	2861.8	2837.1	2835.6	2840.0	2853.1	2871.9	2895.2	2908.2	2918.5	2921.4
10°	2948.9	2927.2	2898.1	2902.5	2911.2	2930.1	2969.3	2988.2	3010.0	3028.9	3024.6
12.5°	3026.0	3007.1	2973.7	2976.6	2991.2	3024.6	3062.4	3085.6	3100.1	3114.7	3120.5
15°	3126.2	3092.8	3056.5	3056.5	3082.7	3119.1	3136.5	3155.4	3164.1	3180.1	3185.9
17.5°	3229.5	3185.9	3137.9	3135.0	3166.9	3184.5	3194.6	3197.5	3200.5	3217.9	3223.6
20°	3332.7	3284.7	3216.4	3210.6	3217.9	3214.9	3213.5	3210.6	3214.9	3236.7	3245.5
22.5°	3434.4	3379.2	3284.7	3258.6	3238.2	3210.6	3209.2	3207.6	3210.6	3232.4	3246.9
25°	3553.6	3486.7	3360.3	3281.8	3213.5	3175.8	3180.1	3181.5	3184.5	3201.9	3225.2
27.5°	3682.9	3608.8	3430.1	3274.6	3151.0	3124.8	3117.5	3121.9	3132.1	3159.8	3187.3
30°	3812.3	3725.1	3494.0	3245.5	3072.5	3036.2	3012.9	3023.1	3055.1	3082.7	3113.2
32.5°	3930.1	3842.8	3544.9	3181.5	2972.2	2915.5	2885.1	2898.1	2930.1	2940.2	2976.6
35°	4068.1	3969.3	3566.7	3079.8	2863.2	2776.0	2735.3	2716.5	2732.4	2722.2	2754.2
37.5°	4222.2	4119.0	3563.7	2946.1	2735.3	2635.1	2578.4	2507.1	2473.7	2438.8	2460.6
40°	4450.3	4302.1	3528.9	2784.7	2577.0	2485.3	2383.6	2263.0	2187.4	2119.1	2123.4
42.5°	4761.4	4556.4	3464.9	2607.4	2398.1	2312.4	2174.3	2033.3	1914.2	1800.8	1790.6
45°	5225.0	4889.2	3385.0	2418.5	2204.9	2120.5	1970.9	1812.4	1677.2	1531.9	1514.4
47.5°	5893.5	5337.0	3309.4	2203.3	2001.3	1924.3	1789.1	1642.4	1482.5	1341.5	1325.5
50°	6812.2	5979.3	3239.6	1994.0	1800.8	1742.6	1635.1	1485.4	1324.1	1210.7	1203.5
52.5°	7980.6	6852.8	3210.6	1792.0	1613.2	1591.5	1505.7	1366.2	1213.6	1117.7	1110.4
55°	9322.2	7897.8	3210.6	1598.8	1449.0	1456.3	1396.8	1267.4	1135.1	1049.4	1040.7
57.5°	10691.3	8955.9	3152.5	1420.0	1309.5	1340.1	1302.3	1188.9	1069.7	981.0	966.5
60°	11952.8	9842.6	2917.0	1257.2	1186.0	1234.0	1209.2	1111.8	966.5	892.4	880.8
62.5°	12922.3	10342.5	2463.5	1127.8	1084.2	1139.5	1126.4	1010.1	947.6	917.1	906.9
65°	13407.7	10261.1	1883.6	1013.0	998.5	1084.2	1056.7	1052.3	1002.9	968.0	956.3
67.5°	13109.7	9560.6	1366.2	928.8	949.0	1033.4	1139.5	1156.9	1065.4	997.0	985.4
70°	11803.2	8293.2	1017.4	848.8	886.6	1034.8	1299.4	1210.7	1045.0	965.0	952.0
72.5°	8979.2	6184.2	789.2	764.4	805.2	1042.1	1370.5	1186.0	986.9	1066.8	1058.1
75°	5134.9	3395.2	633.7	661.3	703.5	973.7	1334.2	1122.1	941.8	979.6	979.6
77.5°	1957.7	1305.1	523.3	559.5	565.4	850.2	1276.1	1117.7	896.8	874.9	798.0
80°	678.8	510.1	433.2	444.7	437.5	755.7	1223.7	972.3	734.0	656.9	635.2
82.5°	277.6	254.3	343.0	328.5	311.0	587.2	988.3	795.0	600.2	530.5	524.7
85°	120.6	161.3	226.7	199.2	180.2	406.9	792.1	672.9	507.3	437.5	436.0
87.5°	24.7	61.1	95.9	90.1	93.0	271.8	562.5	478.2	359.0	268.9	210.7
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)