

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: P966669

Luminaire Tested: **NAV-SB4C-735-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966669
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-735-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30495.8 lumens
Efficiency: N/A
Efficacy: 151.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B4 - U0 - G5

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

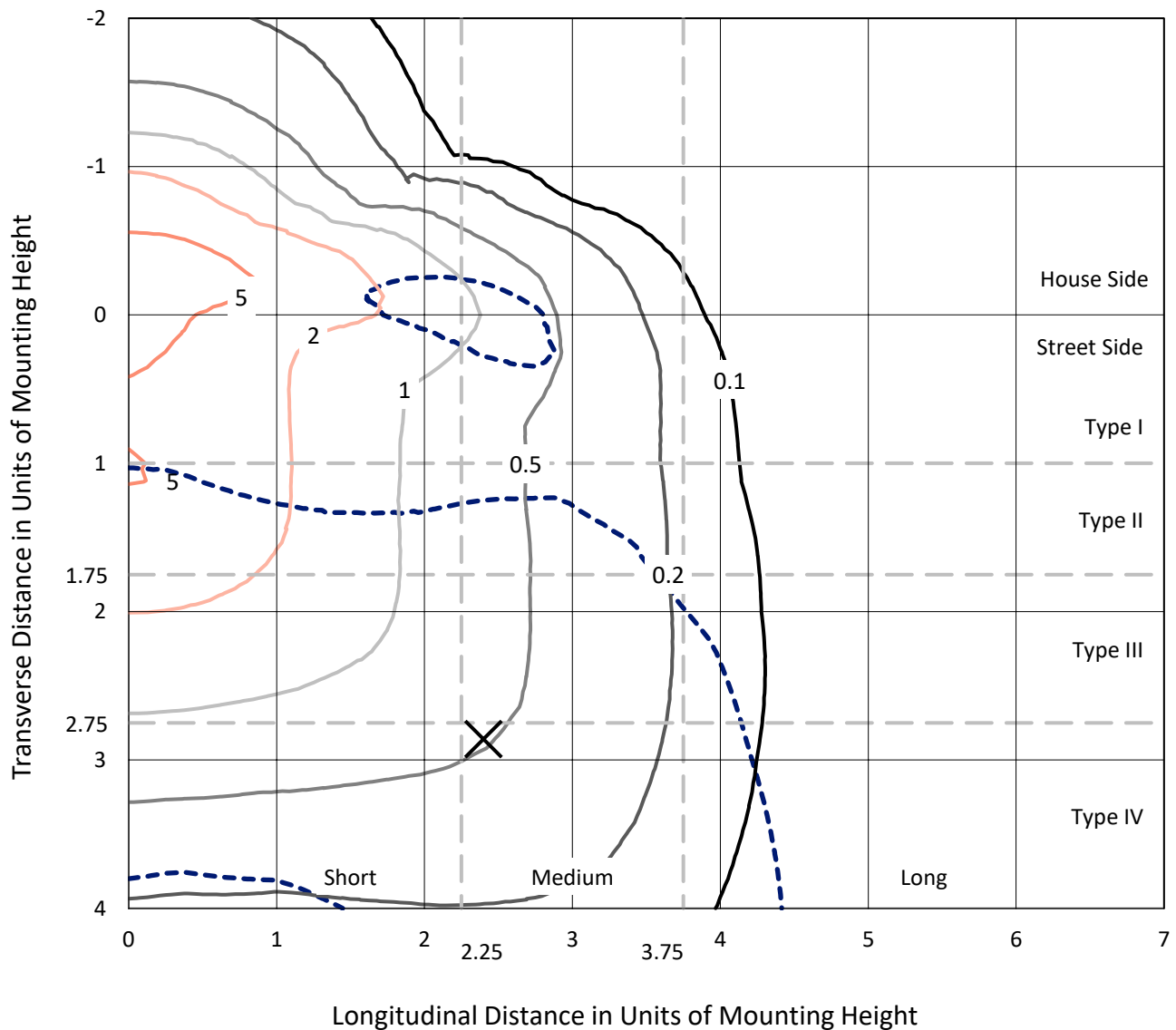


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Iso-Footcandle Lines of Horizontal Illumination

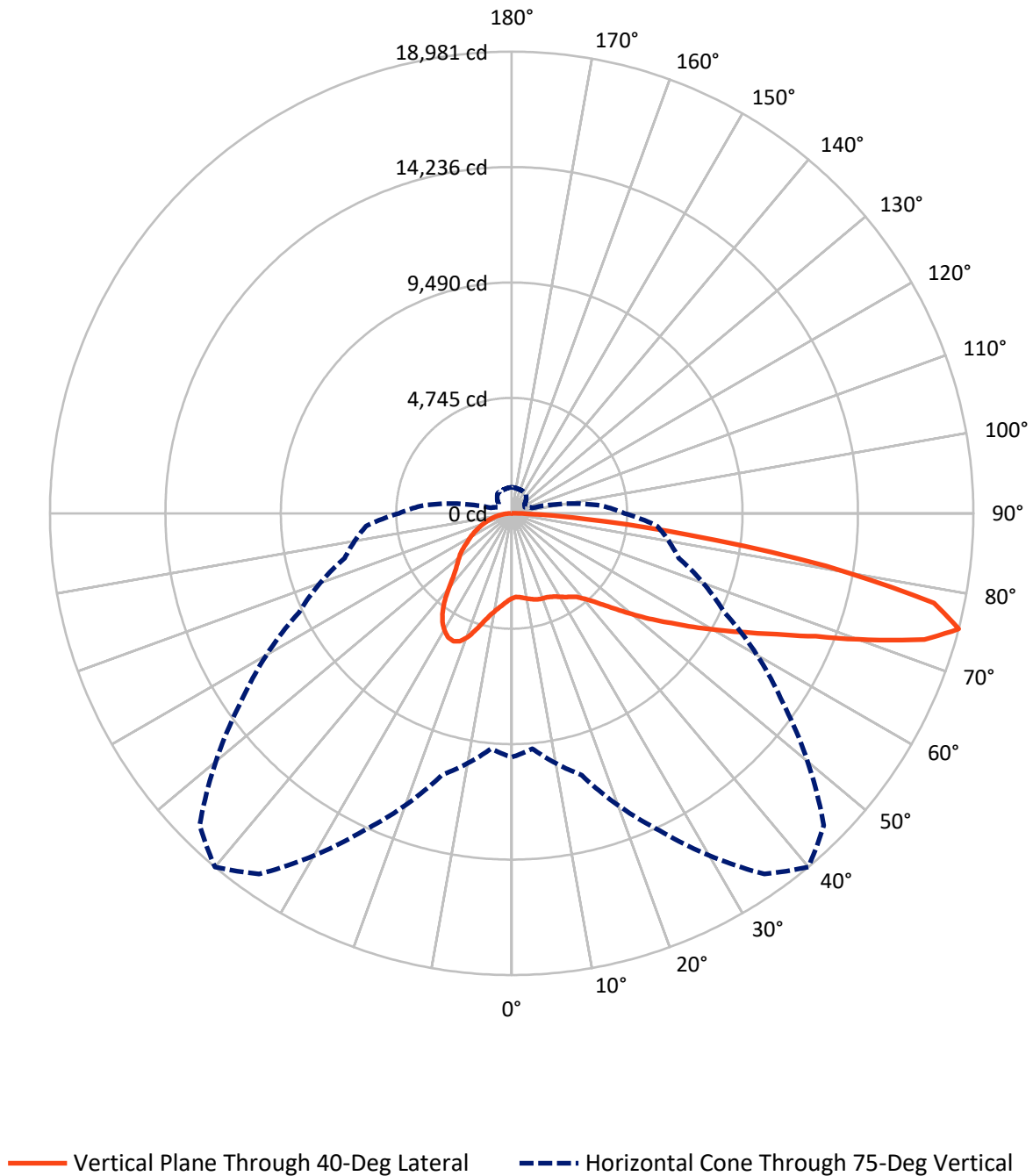
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9448.6	0.0	9448.6
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	21047.2	0.0	21047.2
	% Fixture	69.0	0.0	69.0
Total	Lumens	30495.8	0.0	30495.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	348.1	1.1
10°-20°	1168.7	3.8
20°-30°	2134.0	7.0
30°-40°	3026.5	9.9
40°-50°	4086.7	13.4
50°-60°	5497.8	18.0
60°-70°	6977.9	22.9
70°-80°	6332.9	20.8
80°-90°	923.1	3.0
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°	30495.8	100.0
0°-180°	30495.8	100.0

Coefficient of Utilization



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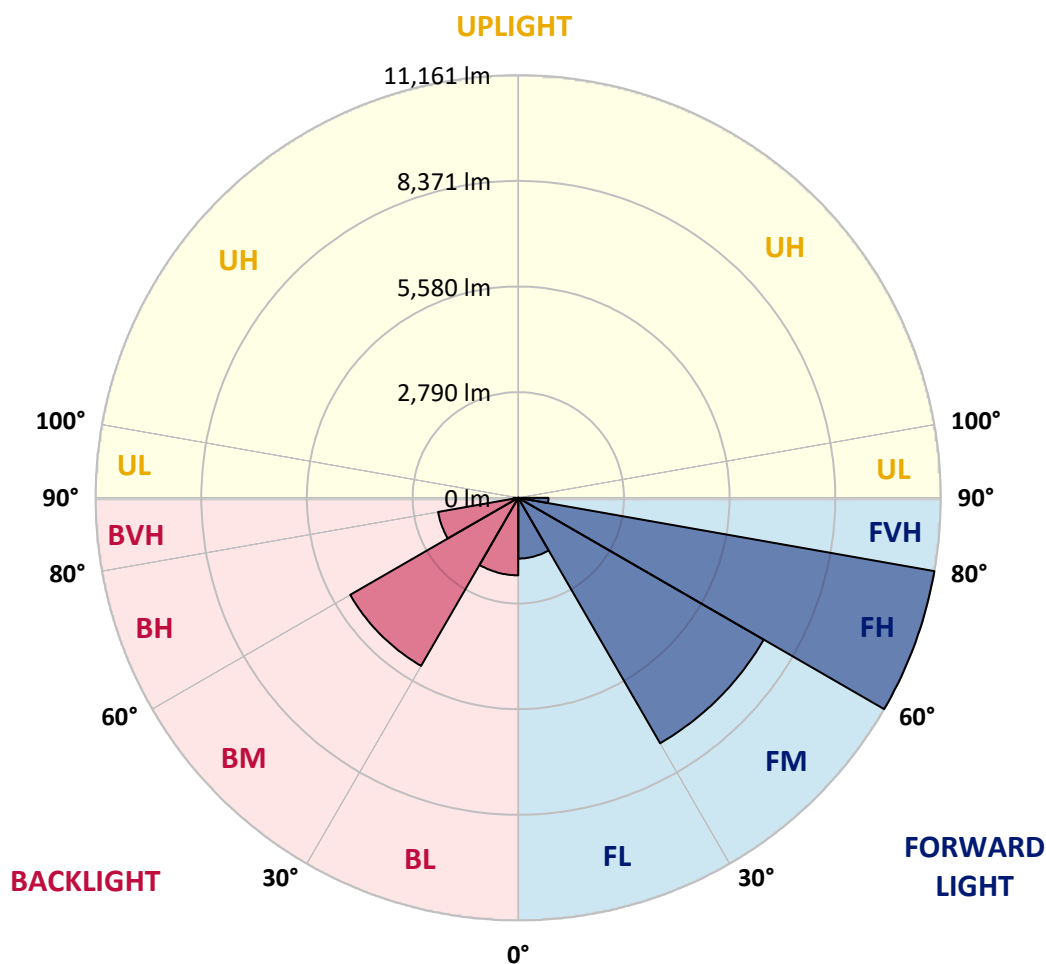
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1604.1	5.3			
FM	(30°-60°)	7486.0	24.5			
FH	(60°-80°)	11161.0	36.6			G4/12000
FVH	(80°-90°)	796.0	2.6			G5
BL	(0°-30°)	2046.7	6.7	B3/2500		
BM	(30°-60°)	5125.0	16.8	B4/8500		
BH	(60°-80°)	2149.8	7.0	B3/2500		G3/2500
BVH	(80°-90°)	127.1	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	3487.3	3487.3	3487.3	3487.3	3487.3	3487.3	3487.3	3487.3	3487.3	3487.3	3487.3
2.5°	3433.9	3453.2	3448.4	3442.0	3442.0	3443.6	3442.0	3453.2	3464.6	3475.9	3493.7
5°	3469.4	3488.9	3479.2	3471.1	3464.6	3463.0	3458.1	3456.5	3463.0	3477.5	3501.8
7.5°	3539.0	3558.4	3543.8	3529.3	3516.4	3509.9	3503.4	3493.7	3488.9	3496.9	3530.9
10°	3616.6	3636.1	3618.2	3592.4	3571.3	3563.2	3556.7	3547.1	3540.7	3545.5	3582.7
12.5°	3694.3	3713.7	3689.4	3653.8	3626.3	3621.5	3613.4	3610.2	3608.5	3607.0	3644.1
15°	3767.1	3783.3	3752.5	3710.4	3681.3	3673.3	3665.2	3670.0	3678.1	3687.8	3729.9
17.5°	3823.7	3839.9	3794.6	3739.5	3712.0	3708.9	3703.9	3720.1	3742.8	3767.1	3818.8
20°	3875.4	3891.6	3833.4	3759.0	3726.6	3726.6	3728.2	3762.2	3794.6	3830.1	3901.4
22.5°	3948.2	3961.1	3890.0	3788.1	3741.1	3744.4	3757.3	3791.3	3831.8	3880.2	3978.9
25°	4056.5	4066.3	3978.9	3843.0	3789.7	3799.4	3810.7	3826.9	3865.7	3922.4	4055.0
27.5°	4231.3	4239.4	4124.5	3940.1	3859.2	3875.4	3891.6	3880.2	3898.1	3946.6	4116.4
30°	4477.1	4482.0	4336.4	4092.2	3977.3	3985.4	3988.7	3941.7	3907.8	3946.6	4160.1
32.5°	4768.3	4766.7	4593.5	4276.5	4111.6	4103.5	4076.0	3983.8	3904.5	3938.5	4198.9
35°	5219.5	5201.8	4978.5	4535.3	4263.6	4213.5	4148.8	4030.7	3920.7	3930.5	4232.8
37.5°	5966.8	5911.8	5602.9	4959.2	4490.0	4362.3	4266.9	4106.8	3956.3	3927.2	4273.3
40°	6809.5	6740.0	6400.3	5539.8	4829.7	4624.3	4470.6	4215.1	4014.5	3941.7	4333.2
42.5°	7809.1	7710.5	7344.8	6224.0	5260.0	4962.3	4731.1	4352.6	4100.2	3988.7	4414.1
45°	9036.7	8905.7	8388.1	6995.5	5801.8	5405.5	5096.6	4561.2	4231.3	4079.2	4535.3
47.5°	10277.3	10309.7	9573.7	7878.7	6452.1	5952.3	5554.4	4875.0	4422.2	4224.8	4731.1
50°	11595.5	11618.2	10752.9	8857.2	7189.6	6570.1	6068.7	5226.0	4687.4	4431.8	5023.8
52.5°	12624.2	12627.5	11823.6	9881.0	7957.9	7249.4	6623.4	5627.1	4994.7	4706.8	5413.6
55°	13268.0	13259.9	12574.1	10849.9	8841.0	7962.7	7238.1	6083.3	5370.0	5030.3	5903.7
57.5°	13735.4	13711.2	13091.7	11682.8	9782.4	8805.5	7933.6	6600.8	5813.2	5415.3	6549.0
60°	13913.4	13898.8	13442.7	12402.6	10772.2	9737.1	8735.9	7179.9	6316.2	5869.8	7378.9
62.5°	13981.3	14008.8	13787.2	13099.8	11831.7	10769.1	9617.4	7872.2	6882.3	6384.1	8253.9
65°	14220.6	14270.8	14225.6	14012.1	13028.6	11977.2	10786.8	8695.5	7500.1	6935.7	9167.7
67.5°	14694.6	14744.7	14764.1	15103.8	14490.8	13483.2	12245.8	9720.9	8223.2	7508.2	9855.2
70°	14683.2	14668.7	15011.6	15972.4	16321.8	15568.0	14212.5	10982.6	9085.3	7983.7	9942.5
72.5°	13365.1	13248.5	14058.9	15962.6	17845.4	17745.1	16614.5	12609.7	9829.2	8041.9	8627.5
75°	10026.7	9716.1	11147.5	14385.7	18099.3	18980.8	18141.4	13619.0	9652.9	7105.5	6004.0
77.5°	4287.9	3975.7	5662.7	10649.3	16198.8	17743.5	16740.7	11881.8	7705.5	4698.7	2948.6
80°	1122.5	1120.9	1711.2	4828.1	11016.5	13103.0	11495.3	7673.3	4402.7	1679.0	813.5
82.5°	464.2	452.8	629.1	1877.9	5382.9	7352.9	6000.8	3422.6	1590.0	454.5	270.1
85°	173.0	171.5	305.7	648.6	1898.9	3032.8	2194.9	875.0	396.3	221.6	121.4
87.5°	48.5	46.9	66.3	224.8	462.6	702.0	375.3	143.9	111.6	87.3	35.6
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°	3487.3	3487.3	3487.3	3487.3	3487.3	3487.3	3487.3	3487.3	3487.3	3487.3	3487.3
2.5°	3498.5	3506.6	3521.2	3532.6	3547.1	3563.2	3585.9	3600.4	3615.0	3624.7	3618.2
5°	3513.1	3530.9	3568.1	3605.3	3649.0	3689.4	3736.3	3770.3	3797.8	3805.8	3809.1
7.5°	3545.5	3574.6	3637.6	3700.8	3770.3	3836.6	3904.5	3962.8	4009.7	4027.4	4029.1
10°	3602.1	3640.9	3729.9	3818.8	3911.0	4012.9	4100.2	4184.4	4250.7	4278.1	4279.8
12.5°	3673.3	3721.8	3838.2	3961.1	4088.9	4229.7	4342.8	4446.3	4528.9	4566.1	4566.1
15°	3765.4	3828.5	3977.3	4142.3	4329.9	4525.7	4669.6	4784.4	4876.6	4921.9	4918.7
17.5°	3865.7	3949.8	4137.4	4386.6	4655.0	4912.2	5080.4	5164.6	5260.0	5303.7	5302.0
20°	3962.8	4066.3	4334.8	4697.1	5054.6	5328.0	5463.8	5486.4	5492.9	5497.7	5510.7
22.5°	4063.1	4202.2	4582.3	5088.5	5471.9	5661.1	5680.5	5583.5	5447.6	5384.5	5402.3
25°	4173.1	4357.4	4905.8	5520.3	5830.9	5853.6	5704.7	5468.6	5211.4	5093.3	5111.2
27.5°	4279.8	4537.0	5293.9	5932.8	6089.7	5890.8	5570.6	5235.7	4925.1	4800.6	4815.1
30°	4386.6	4742.4	5722.6	6293.5	6207.8	5798.6	5358.6	4985.0	4672.9	4541.8	4556.3
32.5°	4494.9	4981.8	6215.9	6554.0	6186.8	5602.9	5095.0	4703.5	4428.6	4291.1	4308.9
35°	4617.8	5276.2	6683.3	6696.2	6046.1	5314.9	4747.2	4367.1	4127.8	4017.8	4042.0
37.5°	4777.9	5649.8	7095.8	6731.9	5800.2	4892.8	4315.4	3969.2	3771.9	3721.8	3757.3
40°	4976.9	6099.5	7411.2	6675.2	5436.3	4380.0	3843.0	3566.5	3454.9	3466.2	3505.0
42.5°	5235.7	6602.4	7632.8	6529.7	4930.0	3851.1	3429.0	3306.0	3359.4	3404.7	3446.8
45°	5572.1	7124.9	7770.2	6282.2	4357.4	3403.1	3184.8	3213.9	3254.3	3259.2	3291.5
47.5°	6002.4	7653.8	7860.8	5908.6	3773.5	3087.7	3029.5	3035.9	3027.8	2993.9	3019.8
50°	6539.4	8168.1	7941.7	5413.6	3276.9	2890.4	2812.8	2790.2	2678.5	2568.5	2583.1
52.5°	7150.8	8640.4	7975.6	4798.9	2890.4	2725.4	2599.3	2456.9	2248.2	2214.3	2225.6
55°	7830.1	9077.2	7888.3	4043.6	2565.3	2513.5	2322.6	2151.2	2128.6	2099.5	2104.3
57.5°	8642.1	9547.9	7710.5	3201.0	2232.0	2266.1	2080.0	2099.5	2059.0	2013.7	2005.6
60°	9530.0	10034.6	7398.2	2432.6	1887.5	1957.1	2017.0	2015.4	2004.0	1966.9	1953.9
62.5°	10329.0	10355.0	6783.7	1863.3	1585.1	1717.7	1881.1	1879.4	1869.8	1848.8	1840.7
65°	10804.6	10306.5	5758.1	1467.1	1336.0	1520.4	1696.7	1709.7	1711.2	1709.7	1709.7
67.5°	10720.5	9738.7	4350.9	1167.8	1130.6	1319.9	1513.9	1531.8	1544.7	1548.0	1551.1
70°	9769.5	8491.6	2837.0	931.6	947.8	1143.6	1340.9	1358.6	1370.0	1382.9	1389.4
72.5°	7615.0	6243.4	1623.9	753.8	787.7	991.5	1169.4	1190.4	1196.9	1221.2	1230.9
75°	4640.5	3671.7	876.7	593.6	647.0	847.6	999.6	1023.9	1035.1	1064.3	1067.5
77.5°	2206.2	1590.0	499.8	462.6	520.8	692.3	844.3	871.8	841.1	857.2	844.3
80°	745.7	590.4	315.4	352.6	397.9	540.3	676.1	703.6	638.9	635.7	629.1
82.5°	260.5	239.3	200.6	234.5	257.2	386.5	511.1	546.7	475.5	474.0	451.3
85°	101.9	97.1	111.6	127.8	153.6	237.8	336.4	354.2	292.7	236.2	232.9
87.5°	21.0	22.7	27.5	29.1	46.9	82.5	121.4	148.8	118.1	100.2	92.1
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)