

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: P965119

Luminaire Tested: **NAV-SB3D-740-U-SL4**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965119
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-SB3D-740-U-SL4
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32820.5 lumens
Efficiency: N/A
Efficacy: 150.5 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): 218.1
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



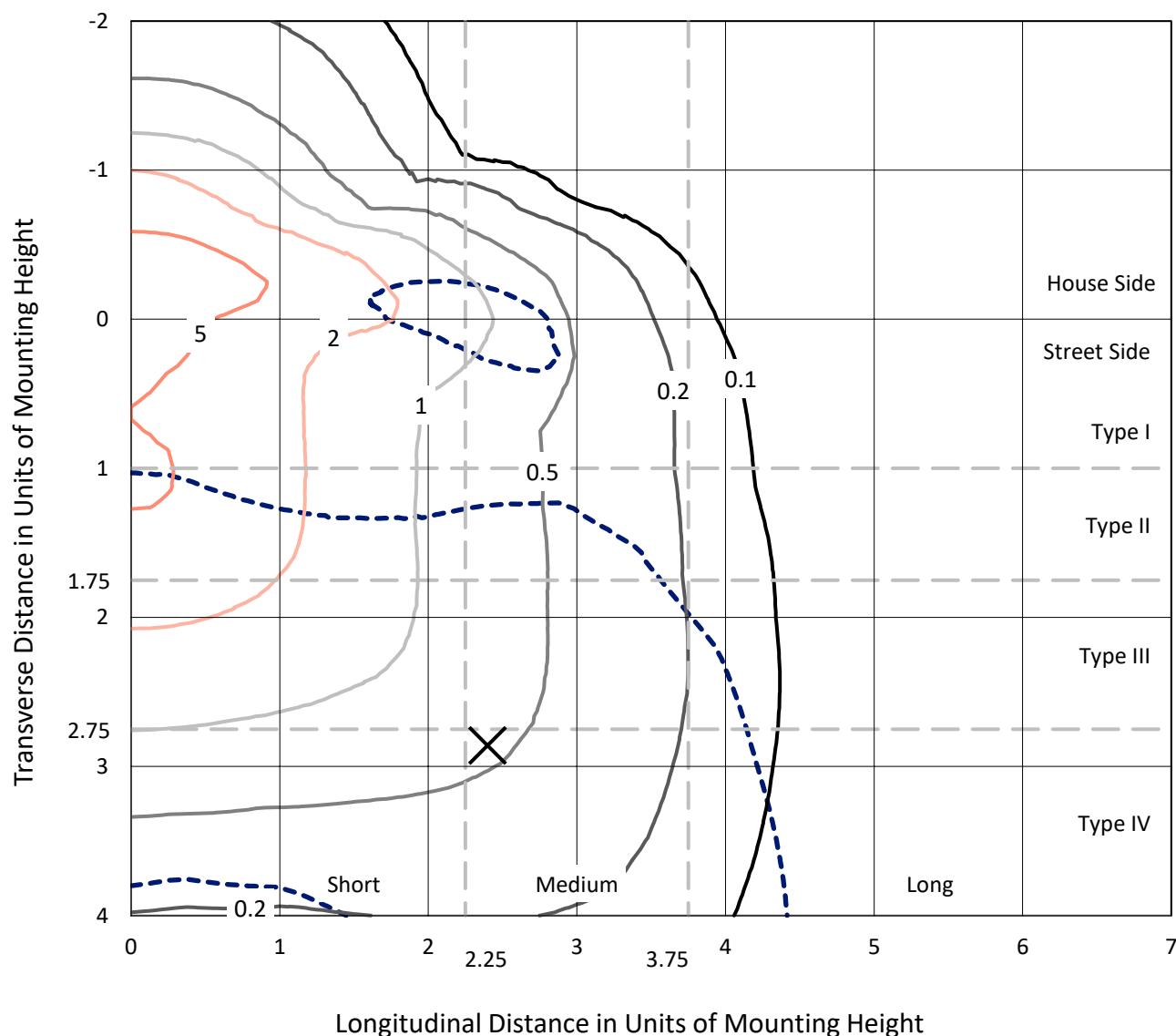
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

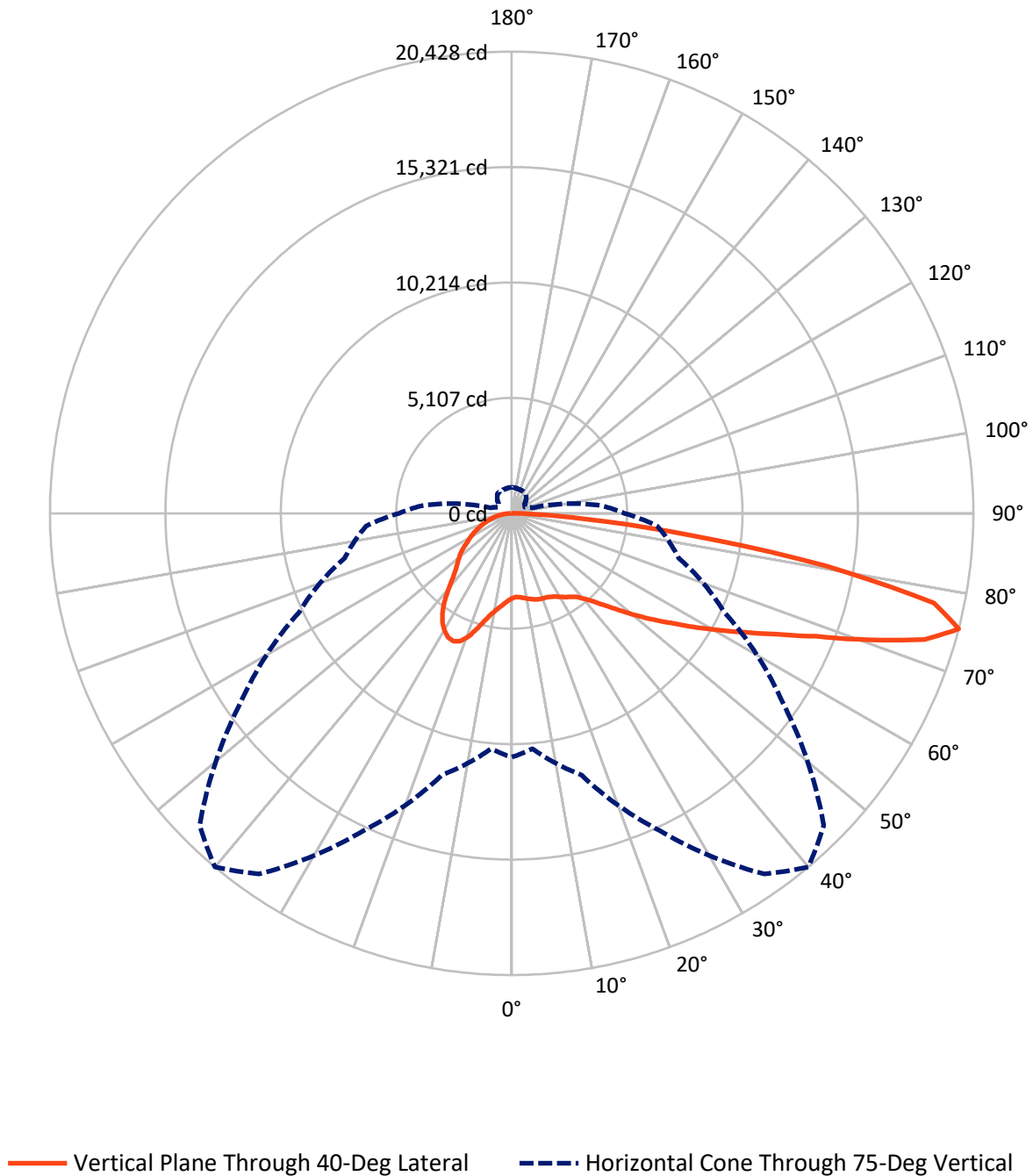
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 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	10168.9	0.0	10168.9
	% Fixture	31.0	0.0	31.0
Street Side	Lumens	22651.6	0.0	22651.6
	% Fixture	69.0	0.0	69.0
Total	Lumens	32820.5	0.0	32820.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	374.6	1.1
10°-20°	1257.8	3.8
20°-30°	2296.6	7.0
30°-40°	3257.3	9.9
40°-50°	4398.3	13.4
50°-60°	5916.9	18.0
60°-70°	7509.9	22.9
70°-80°	6815.7	20.8
80°-90°	993.5	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°	32820.5	100.0
0°-180°	32820.5	100.0

Coefficient of Utilization



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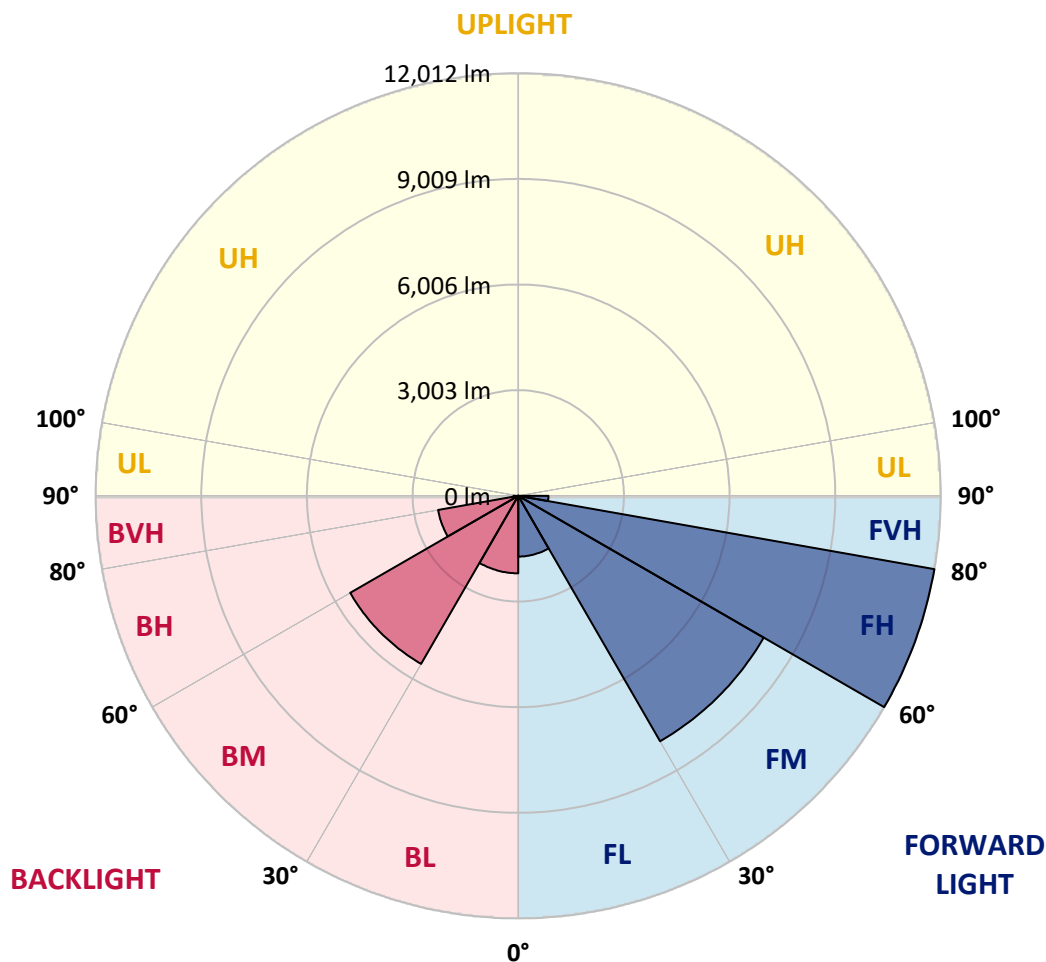
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1726.4	5.3			
FM	(30°-60°)	8056.7	24.5			
FH	(60°-80°)	12011.8	36.6			G5
FVH	(80°-90°)	856.7	2.6			G5
BL	(0°-30°)	2202.7	6.7	B3/2500		
BM	(30°-60°)	5515.7	16.8	B4/8500		
BH	(60°-80°)	2313.7	7.0	B3/2500		G3/2500
BVH	(80°-90°)	136.8	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°	3753.0	3753.0	3753.0	3753.0	3753.0	3753.0	3753.0	3753.0	3753.0	3753.0	3753.0
2.5°	3695.6	3716.5	3711.3	3704.3	3704.3	3706.1	3704.3	3716.5	3728.7	3740.8	3760.0
5°	3733.9	3754.8	3744.3	3735.6	3728.7	3727.0	3721.8	3720.0	3727.0	3742.6	3768.7
7.5°	3808.8	3829.7	3814.0	3798.3	3784.4	3777.4	3770.5	3760.0	3754.8	3763.5	3800.1
10°	3892.3	3913.2	3894.1	3866.2	3843.5	3834.8	3828.0	3817.5	3810.5	3815.8	3855.7
12.5°	3975.9	3996.8	3970.6	3932.4	3902.8	3897.6	3888.8	3885.4	3883.6	3881.9	3922.0
15°	4054.2	4071.6	4038.6	3993.3	3961.9	3953.2	3944.5	3949.7	3958.4	3968.9	4014.2
17.5°	4115.2	4132.6	4083.8	4024.7	3995.0	3991.6	3986.3	4003.8	4028.1	4054.2	4109.9
20°	4170.8	4188.3	4125.6	4045.5	4010.7	4010.7	4012.5	4049.0	4083.8	4122.1	4198.7
22.5°	4249.1	4263.1	4186.5	4076.8	4026.4	4029.9	4043.7	4080.3	4123.9	4176.1	4282.2
25°	4365.8	4376.2	4282.2	4136.1	4078.6	4089.0	4101.2	4118.7	4160.4	4221.4	4364.0
27.5°	4553.8	4562.5	4439.0	4240.5	4153.4	4170.8	4188.3	4176.1	4195.2	4247.4	4430.3
30°	4818.4	4823.6	4666.9	4404.1	4280.5	4289.2	4292.7	4242.3	4205.7	4247.4	4477.2
32.5°	5131.8	5130.0	4943.8	4602.6	4425.0	4416.3	4386.7	4287.5	4202.2	4238.8	4519.0
35°	5617.4	5598.2	5358.1	4881.0	4588.6	4534.7	4465.0	4338.0	4219.6	4230.1	4555.5
37.5°	6421.6	6362.5	6030.0	5337.2	4832.4	4694.8	4592.1	4419.8	4257.8	4226.6	4599.1
40°	7328.5	7253.7	6888.2	5962.1	5197.9	4976.8	4811.5	4536.4	4320.6	4242.3	4663.4
42.5°	8404.4	8298.2	7904.8	6698.4	5661.0	5340.7	5091.7	4684.4	4412.8	4292.7	4750.6
45°	9725.6	9584.6	9027.6	7528.7	6244.1	5817.6	5485.1	4908.9	4553.8	4390.2	4881.0
47.5°	11060.8	11095.5	10303.5	8479.2	6943.9	6405.9	5977.8	5246.7	4759.2	4546.9	5091.7
50°	12479.5	12503.9	11572.6	9532.4	7737.6	7071.0	6531.3	5624.4	5044.7	4769.6	5406.8
52.5°	13586.6	13590.1	12725.0	10634.3	8564.5	7802.1	7128.4	6056.1	5375.4	5065.5	5826.3
55°	14279.4	14270.7	13532.7	11677.0	9515.0	8569.7	7789.9	6547.0	5779.3	5413.7	6353.8
57.5°	14782.4	14756.4	14089.6	12573.5	10528.1	9476.6	8538.4	7104.1	6256.3	5828.0	7048.3
60°	14974.0	14958.3	14467.5	13348.1	11593.5	10479.4	9401.8	7727.2	6797.7	6317.2	7941.3
62.5°	15047.1	15076.7	14838.2	14098.4	12733.6	11590.0	10350.6	8472.2	7407.0	6870.8	8883.1
65°	15304.7	15358.7	15309.9	15080.2	14021.8	12890.3	11609.0	9358.2	8071.9	7464.4	9866.6
67.5°	15814.7	15868.7	15889.7	16255.2	15595.4	14510.9	13179.2	10462.0	8850.0	8080.6	10606.4
70°	15802.5	15786.9	16155.9	17190.0	17565.9	16754.8	15296.0	11819.7	9777.8	8592.4	10700.4
72.5°	14383.8	14258.6	15130.6	17179.5	19205.7	19097.8	17881.0	13570.9	10578.6	8655.0	9285.2
75°	10790.9	10456.7	11997.3	15482.3	19479.1	20427.7	19524.3	14657.2	10388.8	7647.1	6461.7
77.5°	4614.8	4278.8	6094.3	11461.1	17433.7	19096.1	18016.8	12787.6	8293.0	5056.9	3173.4
80°	1208.1	1206.3	1841.7	5196.1	11856.3	14101.8	12371.5	8258.1	4738.4	1806.9	875.6
82.5°	499.6	487.4	677.1	2021.0	5793.2	7913.5	6458.2	3683.4	1711.1	489.1	290.7
85°	186.2	184.5	329.0	698.0	2043.6	3263.9	2362.2	941.8	426.5	238.5	130.6
87.5°	52.2	50.5	71.3	242.0	497.8	755.5	403.8	154.9	120.1	94.0	38.3
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°	3753.0	3753.0	3753.0	3753.0	3753.0	3753.0	3753.0	3753.0	3753.0	3753.0	3753.0
2.5°	3765.2	3773.9	3789.6	3801.8	3817.5	3834.8	3859.2	3874.9	3890.6	3901.0	3894.1
5°	3780.9	3800.1	3840.1	3880.1	3927.2	3970.6	4021.2	4057.7	4087.3	4096.0	4099.5
7.5°	3815.8	3847.0	3915.0	3982.8	4057.7	4129.1	4202.2	4264.8	4315.4	4334.5	4336.3
10°	3876.7	3918.5	4014.2	4109.9	4209.2	4318.8	4412.8	4503.3	4574.7	4604.3	4606.0
12.5°	3953.2	4005.5	4130.9	4263.1	4400.6	4552.0	4673.9	4785.3	4874.1	4914.2	4914.2
15°	4052.4	4120.4	4280.5	4458.0	4660.0	4870.6	5025.6	5149.2	5248.4	5297.1	5293.6
17.5°	4160.4	4250.9	4452.8	4720.9	5009.9	5286.6	5467.8	5558.3	5661.0	5707.9	5706.2
20°	4264.8	4376.2	4665.2	5055.2	5439.9	5734.1	5880.2	5904.6	5911.6	5916.8	5930.8
22.5°	4372.8	4522.5	4931.6	5476.4	5888.9	6092.6	6113.5	6009.1	5862.9	5794.9	5814.1
25°	4491.1	4689.6	5279.7	5941.2	6275.5	6299.8	6139.6	5885.4	5608.7	5481.6	5500.8
27.5°	4606.0	4882.8	5697.5	6385.1	6554.0	6339.8	5995.1	5634.8	5300.6	5166.5	5182.2
30°	4720.9	5103.9	6158.8	6773.3	6681.1	6240.6	5767.2	5365.1	5029.1	4888.0	4903.7
32.5°	4837.6	5361.6	6689.8	7053.5	6658.4	6030.0	5483.3	5062.1	4766.1	4618.2	4637.4
35°	4969.8	5678.3	7192.8	7206.8	6506.9	5720.1	5109.1	4700.0	4442.5	4324.1	4350.1
37.5°	5142.2	6080.5	7636.7	7245.0	6242.4	5265.8	4644.4	4271.8	4059.4	4005.5	4043.7
40°	5356.3	6564.4	7976.1	7184.1	5850.7	4714.0	4136.1	3838.3	3718.3	3730.5	3772.2
42.5°	5634.8	7105.8	8214.7	7027.4	5305.8	4144.7	3690.4	3558.1	3615.6	3664.3	3709.6
45°	5996.9	7668.0	8362.6	6761.1	4689.6	3662.5	3427.5	3458.9	3502.4	3507.7	3542.4
47.5°	6460.0	8237.2	8460.0	6359.0	4061.2	3323.2	3260.4	3267.4	3258.7	3222.1	3250.0
50°	7037.9	8790.8	8547.1	5826.3	3526.8	3110.8	3027.1	3002.8	2882.7	2764.3	2780.0
52.5°	7695.9	9299.1	8583.7	5164.8	3110.8	2933.1	2797.4	2644.2	2419.6	2383.1	2395.3
55°	8427.0	9769.1	8489.7	4351.8	2760.8	2705.2	2499.8	2315.2	2290.9	2259.5	2264.7
57.5°	9300.8	10275.7	8298.2	3444.9	2402.3	2438.8	2238.6	2259.5	2215.9	2167.3	2158.5
60°	10256.6	10799.6	7962.2	2618.1	2031.4	2106.3	2170.7	2169.0	2156.8	2116.7	2102.8
62.5°	11116.4	11144.3	7300.8	2005.3	1705.9	1848.7	2024.5	2022.7	2012.3	1989.7	1981.0
65°	11628.2	11092.1	6197.0	1578.9	1437.9	1636.3	1826.0	1840.0	1841.7	1840.0	1840.0
67.5°	11537.7	10481.0	4682.6	1256.9	1216.8	1420.4	1629.3	1648.5	1662.4	1665.9	1669.4
70°	10514.1	9139.0	3053.3	1002.7	1020.1	1230.7	1443.1	1462.3	1474.5	1488.3	1495.3
72.5°	8195.5	6719.3	1747.7	811.2	847.8	1067.1	1258.6	1281.1	1288.1	1314.3	1324.7
75°	4994.2	3951.5	943.5	638.9	696.3	912.1	1075.7	1101.9	1114.1	1145.4	1148.9
77.5°	2374.4	1711.1	537.9	497.8	560.6	745.1	908.7	938.3	905.2	922.6	908.7
80°	802.5	635.4	339.5	379.5	428.2	581.4	727.6	757.3	687.6	684.1	677.1
82.5°	280.2	257.6	215.9	252.5	276.8	416.0	550.1	588.3	511.8	510.0	485.6
85°	109.7	104.4	120.1	137.6	165.3	255.8	362.0	381.2	315.1	254.2	250.7
87.5°	22.7	24.4	29.6	31.4	50.5	88.8	130.6	160.1	127.1	107.9	99.2
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)