

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: P883439

Luminaire Tested: **NAV-SB3D-740-U-T3**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883439
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-740-U-T3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32930 lumens
Efficiency: N/A
Efficacy: 151.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

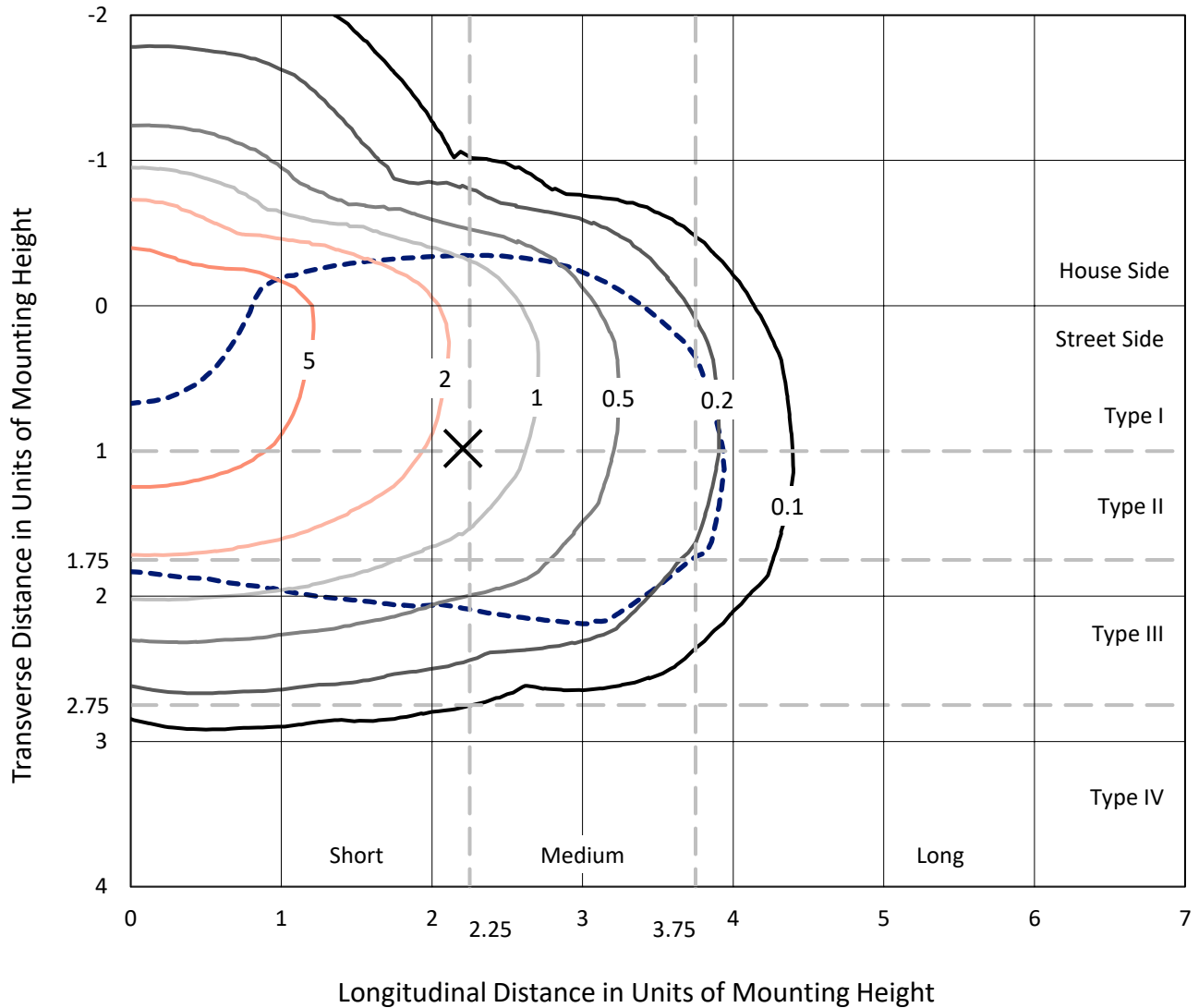
Input Watts (W): 218.1
Input Voltage (V): 120.0
Input Current (Ain): 1.84
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

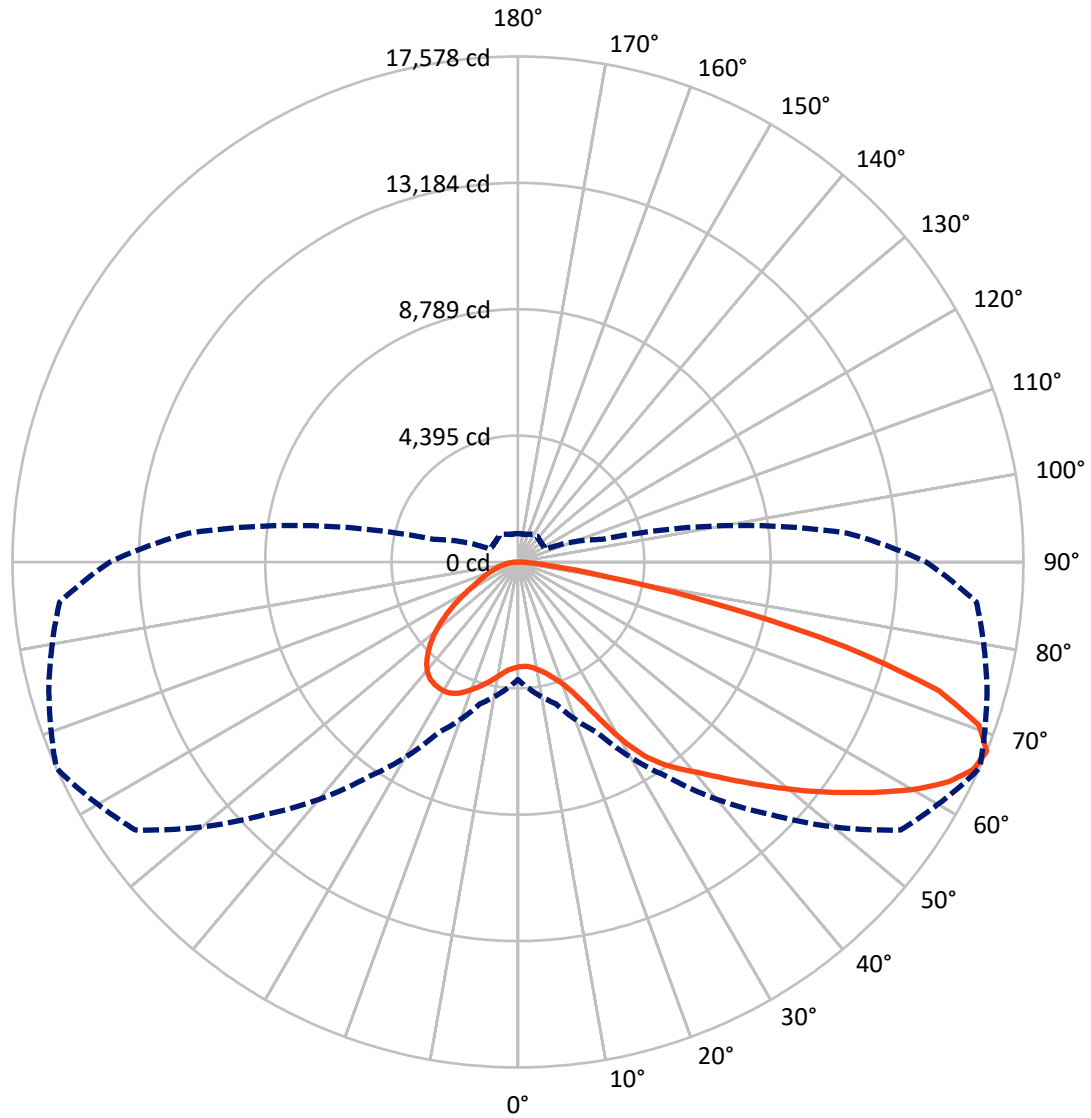
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.3 fc
 Type III - Short - N/A

REPORT NUMBER: P883439
CATALOG NUMBER: NAV-SB3D-740-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8188.0	0.0	8188.0
	% Fixture	24.9	0.0	24.9
Street Side	Lumens	24742.1	0.0	24742.1
	% Fixture	75.1	0.0	75.1
Total	Lumens	32930.0	0.0	32930.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	362.1	1.1
10°-20°	1196.4	3.6
20°-30°	2306.0	7.0
30°-40°	4043.2	12.3
40°-50°	6010.9	18.3
50°-60°	7619.5	23.1
60°-70°	7455.5	22.6
70°-80°	3556.3	10.8
80°-90°	380.1	1.2
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°	32930.0	100.0
0°-180°	32930.0	100.0

Coefficient of Utilization



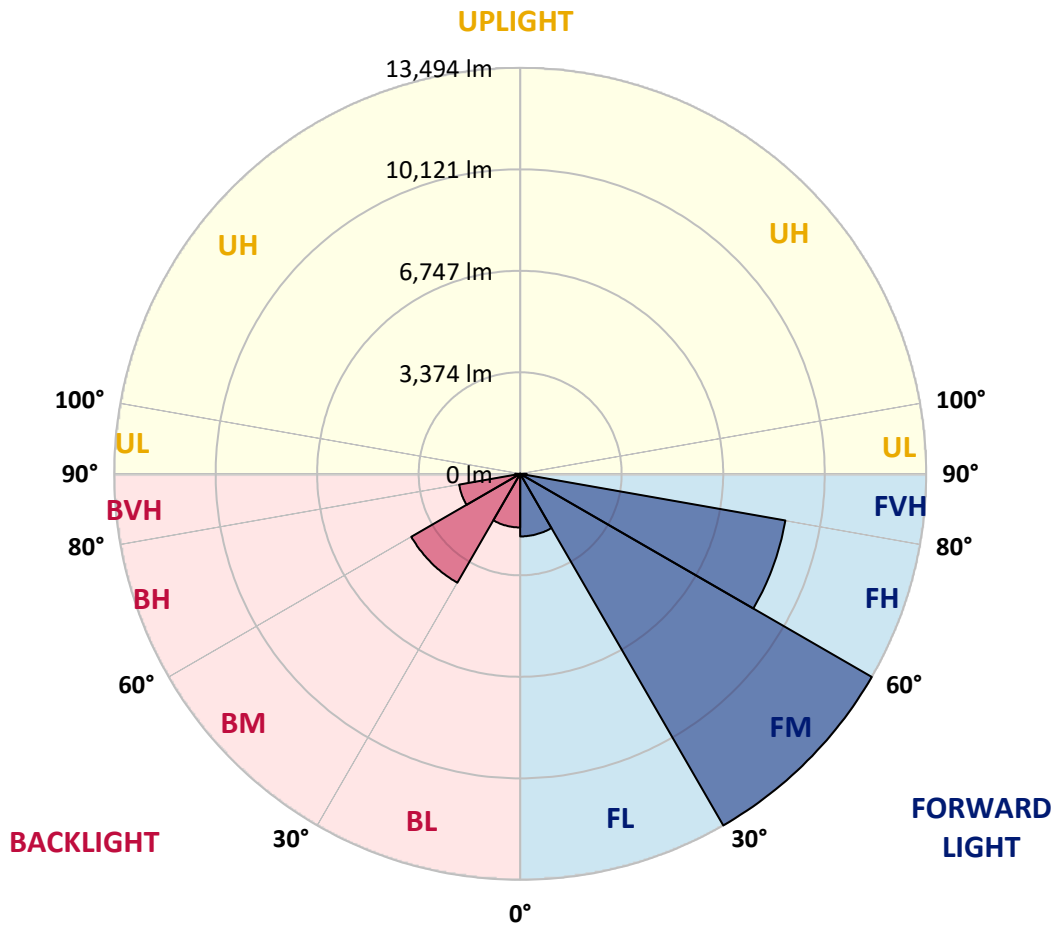
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2080.9	6.3			
FM (30°-60°)	13494.4	41.0			
FH (60°-80°)	8951.3	27.2			G4/12000
FVH (80°-90°)	215.5	0.7			G2/225
BL (0°-30°)	1783.6	5.4	B3/2500		
BM (30°-60°)	4179.2	12.7	B3/5000		
BH (60°-80°)	2060.5	6.3	B3/2500		G3/2500
BVH (80°-90°)	164.6	0.5			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 III Short



REPORT NUMBER: P883439

CATALOG NUMBER: NAV-SB3D-740-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	3652.4	3652.4	3652.4	3652.4	3652.4	3652.4	3652.4	3652.4	3652.4	3652.4	3652.4
2.5°	3614.3	3635.1	3629.9	3621.2	3619.5	3623.0	3628.1	3633.3	3631.6	3640.3	3654.1
5°	3603.9	3624.7	3623.0	3623.0	3629.9	3643.7	3652.4	3661.0	3652.4	3662.8	3681.8
7.5°	3610.8	3626.4	3633.3	3640.3	3657.6	3683.5	3704.3	3723.3	3712.9	3725.0	3749.3
10°	3699.1	3711.2	3718.1	3718.1	3730.2	3759.6	3780.4	3815.0	3806.4	3825.4	3856.5
12.5°	3860.0	3872.1	3872.1	3865.2	3873.8	3892.9	3899.8	3937.8	3922.3	3953.4	3984.6
15°	4057.2	4081.5	4062.4	4050.3	4053.8	4072.8	4071.1	4100.5	4084.9	4110.9	4138.5
17.5°	4275.2	4306.4	4275.2	4273.5	4266.6	4287.3	4289.1	4315.0	4287.3	4306.4	4325.4
20°	4533.0	4576.3	4550.3	4559.0	4543.4	4552.1	4560.7	4598.8	4555.5	4569.4	4564.2
22.5°	4896.4	4948.3	4920.6	4953.5	4943.1	4936.2	4934.4	5001.9	4934.4	4939.6	4889.4
25°	5425.8	5488.1	5439.6	5484.6	5484.6	5507.1	5533.1	5619.6	5507.1	5474.2	5344.5
27.5°	6207.8	6270.1	6174.9	6202.6	6194.0	6249.3	6221.7	6436.2	6315.1	6261.5	6000.2
30°	7149.0	7259.8	7079.8	7072.9	7064.3	7152.5	7192.3	7334.2	7211.3	7157.7	6842.8
32.5°	8166.4	8282.3	8067.7	8005.5	7972.6	8026.2	7993.3	8107.5	8022.8	7939.7	7550.4
35°	9242.5	9356.7	9152.6	9031.4	8900.0	8787.5	8669.8	8699.3	8619.7	8493.4	8090.2
37.5°	10259.9	10469.2	10252.9	10123.2	9881.0	9661.2	9332.5	9195.8	9121.4	9005.5	8598.9
40°	11296.2	11415.6	11251.2	11140.5	10877.5	10533.2	10007.3	9718.3	9618.0	9505.5	9161.2
42.5°	12059.2	12173.4	12085.2	12009.1	11803.2	11403.5	10723.5	10361.9	10216.6	10090.3	9797.9
45°	12664.8	12749.6	12694.2	12721.9	12633.6	12246.1	11465.8	11052.3	10901.8	10747.8	10517.7
47.5°	12908.7	12998.7	13086.9	13251.3	13401.8	13116.4	12263.4	11799.7	11640.5	11483.1	11256.4
50°	12881.1	12972.8	13228.8	13578.3	14045.5	13950.3	13104.2	12595.6	12448.5	12268.6	12059.2
52.5°	12659.6	12763.4	13092.1	13673.5	14417.4	14574.9	13960.7	13417.4	13279.0	13064.5	12855.1
55°	12078.3	12140.5	12633.6	13457.2	14505.7	15010.9	14799.8	14292.9	14154.5	13855.1	13626.8
57.5°	11000.4	11090.3	11808.4	12874.1	14284.2	15306.7	15536.9	15213.3	15080.1	14649.3	14410.5
60°	9593.7	9737.4	10559.2	11894.9	13720.2	15305.0	16206.4	16118.2	16007.5	15431.3	15182.2
62.5°	8002.0	8168.1	8958.8	10510.7	12734.0	14870.7	16625.1	16876.0	16818.9	16152.8	15834.4
65°	6145.5	6259.7	7047.0	8720.0	11199.3	13938.2	16673.6	17393.3	17403.7	16701.3	16175.3
67.5°	4091.8	4420.6	5104.0	6543.5	9143.9	12413.9	16248.0	17478.1	17578.4	16889.8	16004.0
70°	1996.6	2429.1	3098.7	4252.7	6543.5	10076.5	15135.5	16782.6	17005.8	16339.7	14983.2
72.5°	828.7	968.9	1334.0	2098.7	3756.2	6799.5	12900.1	14896.7	15310.2	14478.0	12597.3
75°	558.8	605.6	763.0	1076.2	1711.1	3353.1	9303.1	11107.6	11773.8	10934.6	8938.0
77.5°	430.8	460.2	555.4	752.6	1017.3	1268.2	4979.4	6694.0	7038.3	6515.8	4650.7
80°	339.1	361.6	415.2	548.5	721.5	678.2	1697.3	3033.0	3231.9	2711.2	1494.9
82.5°	294.1	302.8	297.6	372.0	479.3	396.2	557.1	1119.4	1235.3	896.2	487.9
85°	212.8	237.0	247.4	230.1	254.3	200.7	228.4	396.2	436.0	389.3	275.1
87.5°	86.5	128.0	157.4	148.8	93.4	57.1	70.9	115.9	133.2	145.3	90.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P883439

CATALOG NUMBER: NAV-SB3D-740-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3652.4	3652.4	3652.4	3652.4	3652.4	3652.4	3652.4	3652.4	3652.4	3652.4	3652.4
2.5°	3655.8	3667.9	3676.6	3687.0	3693.9	3704.3	3725.0	3737.2	3738.9	3747.5	3745.8
5°	3688.7	3706.0	3725.0	3752.7	3783.9	3809.8	3849.6	3877.3	3887.7	3896.3	3894.6
7.5°	3759.6	3783.9	3818.5	3866.9	3911.9	3946.5	3994.9	4027.8	4060.7	4072.8	4074.5
10°	3865.2	3899.8	3950.0	4015.7	4064.2	4109.1	4159.3	4187.0	4219.9	4233.7	4240.6
12.5°	3996.7	4033.0	4098.8	4190.5	4235.4	4266.6	4283.9	4277.0	4283.9	4296.0	4299.5
15°	4147.2	4187.0	4261.4	4360.0	4391.2	4363.5	4325.4	4290.8	4285.6	4289.1	4301.2
17.5°	4325.4	4354.8	4441.3	4524.4	4501.9	4387.7	4304.6	4249.3	4221.6	4212.9	4225.1
20°	4574.5	4574.5	4645.5	4697.4	4546.9	4353.1	4223.3	4133.4	4076.3	4052.0	4046.8
22.5°	4877.3	4849.6	4894.6	4858.3	4538.2	4256.2	4076.3	3920.5	3834.0	3799.4	3794.2
25°	5261.4	5228.5	5216.4	4991.5	4475.9	4102.2	3809.8	3621.2	3545.1	3526.1	3529.5
27.5°	5841.0	5758.0	5600.5	5064.2	4361.7	3860.0	3498.4	3323.6	3280.4	3282.1	3287.3
30°	6612.7	6446.6	6060.8	5076.3	4174.9	3517.4	3180.0	3055.5	3034.7	3043.4	3072.8
32.5°	7327.2	7169.8	6531.4	5020.9	3887.7	3181.8	2894.6	2811.5	2780.4	2790.8	2804.6
35°	7887.8	7844.6	6967.4	4943.1	3534.7	2866.9	2638.5	2567.6	2507.0	2493.2	2503.5
37.5°	8417.2	8399.9	7294.4	4834.1	3185.2	2643.7	2432.6	2339.2	2250.9	2202.5	2204.2
40°	8998.6	8981.3	7508.9	4666.2	2875.5	2449.9	2247.5	2124.6	2015.6	1927.4	1936.1
42.5°	9652.6	9550.5	7611.0	4425.8	2612.5	2285.5	2097.0	1930.9	1787.3	1705.9	1711.1
45°	10367.1	10137.0	7609.3	4119.5	2391.1	2135.0	1936.1	1700.7	1567.5	1491.4	1487.9
47.5°	11124.9	10697.6	7515.8	3780.4	2176.5	1968.9	1686.9	1507.0	1418.7	1372.0	1361.6
50°	11907.0	11221.8	7356.6	3391.1	1956.8	1780.3	1531.2	1408.4	1340.9	1297.6	1282.1
52.5°	12642.3	11697.6	7164.6	2949.9	1733.6	1596.9	1462.0	1366.8	1295.9	1247.4	1226.7
55°	13325.7	12107.7	6893.0	2498.4	1552.0	1474.1	1429.1	1349.5	1268.2	1211.1	1188.6
57.5°	13933.0	12374.1	6424.1	2074.5	1422.2	1389.3	1394.5	1320.1	1226.7	1178.2	1147.1
60°	14438.2	12569.6	5730.3	1681.7	1316.7	1306.3	1340.9	1264.7	1155.7	1100.4	1076.2
62.5°	14741.0	12566.2	4879.1	1377.2	1226.7	1230.1	1269.9	1195.5	1084.8	1032.9	1017.3
65°	14715.0	12258.2	3944.8	1178.2	1140.2	1143.6	1195.5	1119.4	1026.0	994.8	993.1
67.5°	14194.2	11507.3	3026.1	1048.5	1045.0	1060.6	1121.1	1067.5	989.7	986.2	991.4
70°	12784.2	9948.4	2180.0	944.7	946.4	968.9	1048.5	1034.6	970.6	977.5	975.8
72.5°	10251.2	7585.0	1463.7	835.7	837.4	873.7	979.3	1008.7	951.6	1043.3	1057.1
75°	6827.2	4730.3	941.2	719.7	721.5	768.2	918.7	958.5	899.7	1039.8	1048.5
77.5°	3280.4	2126.4	681.7	605.6	605.6	648.8	794.1	858.2	766.5	808.0	740.5
80°	1133.3	799.3	536.4	487.9	477.5	506.9	669.6	744.0	660.9	609.0	571.0
82.5°	446.4	415.2	430.8	378.9	344.3	363.3	520.8	614.2	486.2	439.5	437.7
85°	256.1	269.9	304.5	250.9	199.0	223.2	382.4	441.2	366.8	323.5	330.5
87.5°	69.2	95.2	140.1	129.8	90.0	95.2	181.7	244.0	211.1	162.6	167.8
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)