

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: P962914

Luminaire Tested: **NAV-SB2D-727-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962914
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2D-727-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19230 lumens
Efficiency: N/A
Efficacy: 130.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

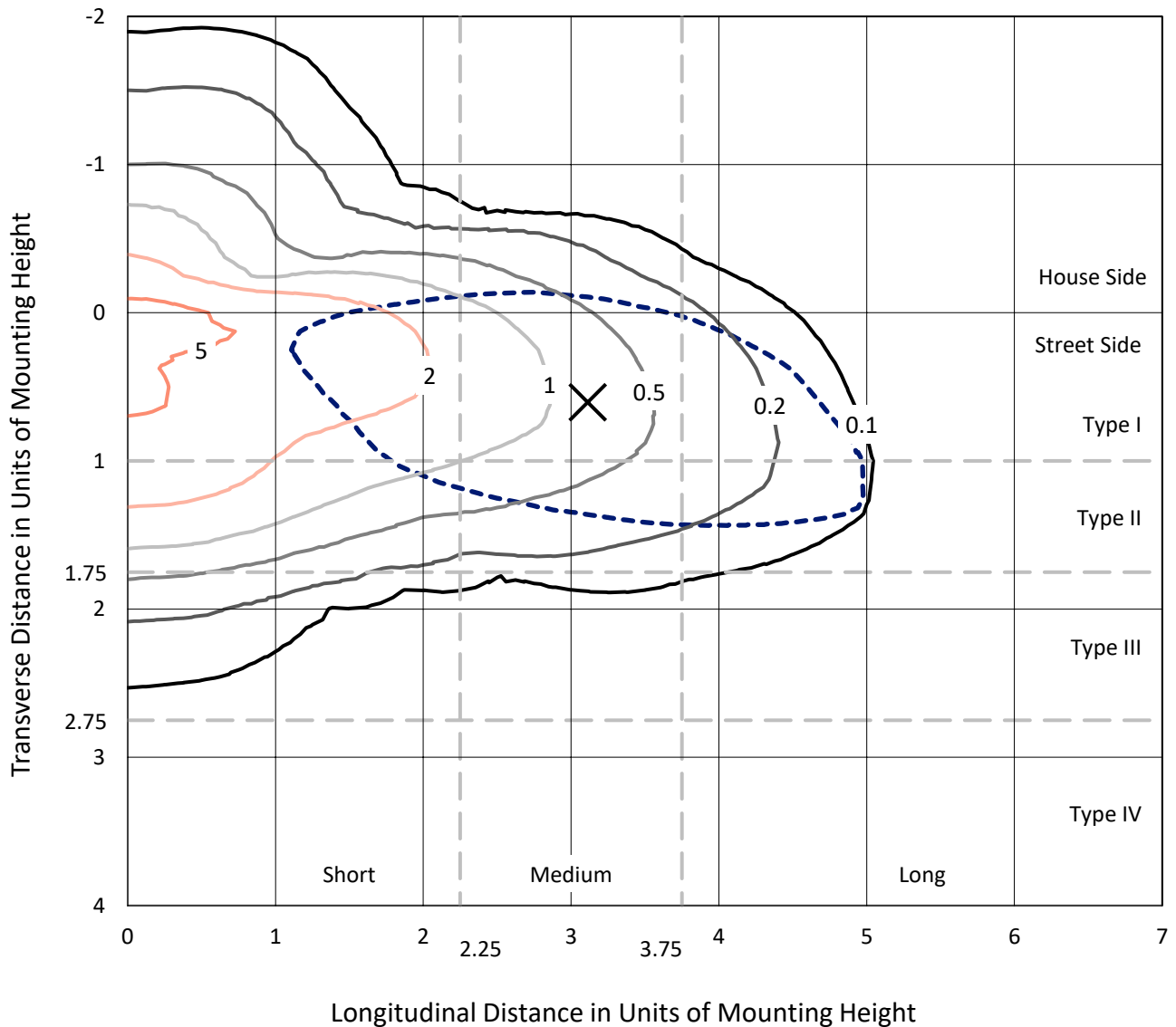
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P962914
 CATALOG NUMBER: NAV-SB2D-727-U-SL2

Iso-Footcandle Lines of Horizontal Illumination

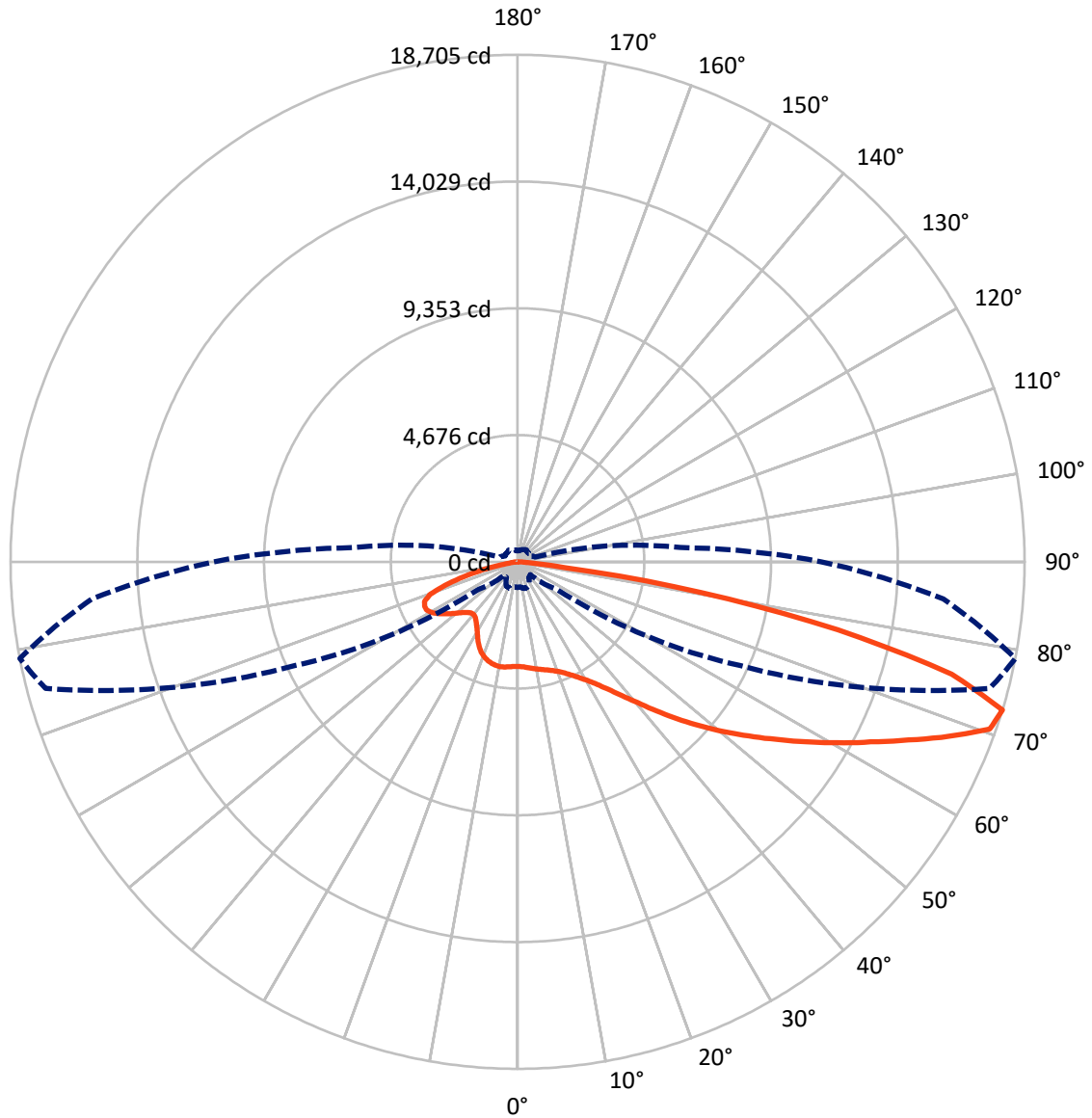
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type II - Medium - N/A

REPORT NUMBER: P962914
CATALOG NUMBER: NAV-SB2D-727-U-SL2

Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P962914
 CATALOG NUMBER: NAV-SB2D-727-U-SL2

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4231.7	0.0	4231.7
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	14998.3	0.0	14998.3
	% Fixture	78.0	0.0	78.0
Total	Lumens	19230.0	0.0	19230.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	350.4	1.8
10°-20°	916.1	4.8
20°-30°	1478.2	7.7
30°-40°	2218.6	11.5
40°-50°	3147.2	16.4
50°-60°	3974.6	20.7
60°-70°	4036.7	21.0
70°-80°	2751.2	14.3
80°-90°	356.9	1.9
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°	19230.0	100.0
0°-180°	19230.0	100.0

Coefficient of Utilization



REPORT NUMBER: P962914

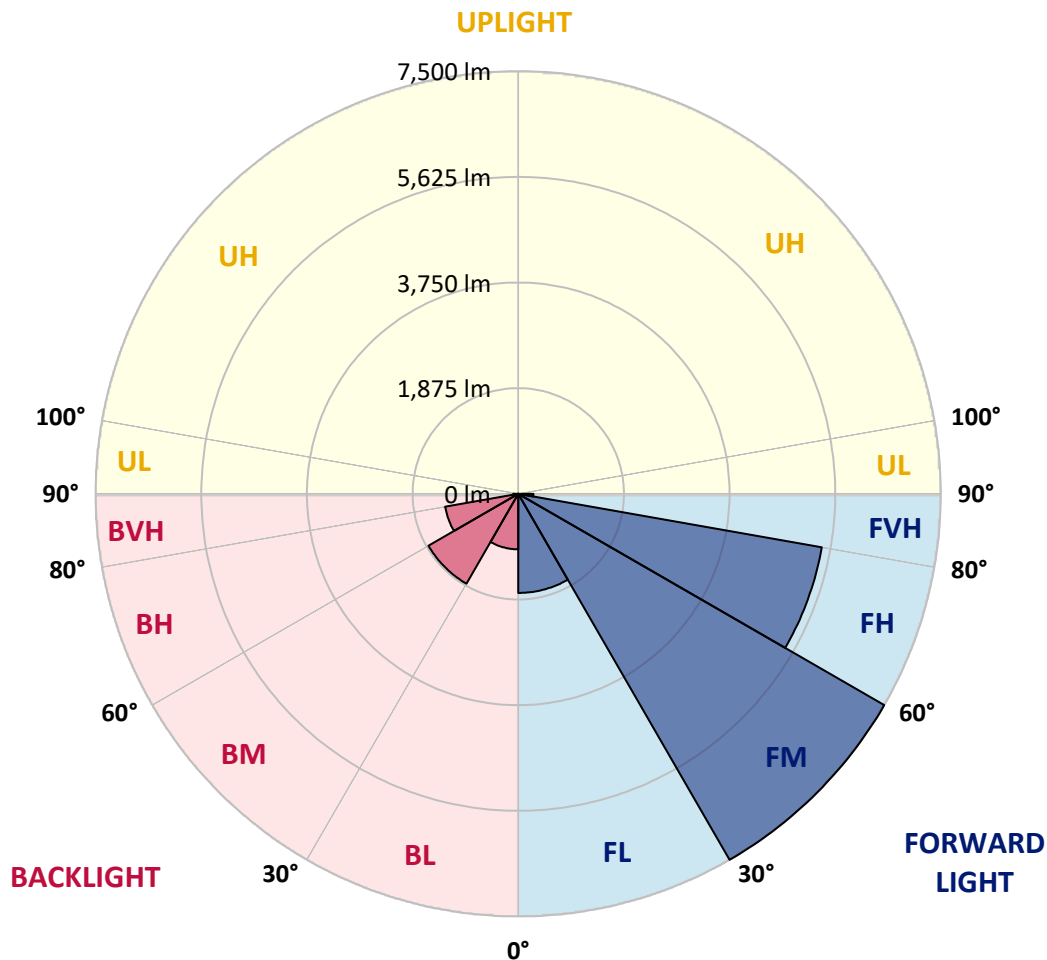
CATALOG NUMBER: NAV-SB2D-727-U-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1759.1	9.1			
FM (30°-60°)	7500.1	39.0			
FH (60°-80°)	5470.3	28.4			G3/7500
FVH (80°-90°)	268.9	1.4			G3/500
BL (0°-30°)	985.7	5.1	B2/1000		
BM (30°-60°)	1840.3	9.6	B2/2500		
BH (60°-80°)	1317.6	6.9	B3/2500		G3/2500
BVH (80°-90°)	88.1	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



REPORT NUMBER: P962914

CATALOG NUMBER: NAV-SB2D-727-U-SL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	3860.3	3860.3	3860.3	3860.3	3860.3	3860.3	3860.3	3860.3	3860.3	3860.3	3860.3
2.5°	3862.3	3844.0	3855.1	3851.1	3856.2	3862.3	3864.4	3867.3	3877.6	3876.6	3875.5
5°	3854.1	3835.9	3851.1	3846.0	3859.2	3873.5	3885.7	3896.8	3913.1	3920.2	3910.1
7.5°	3836.9	3824.7	3839.9	3855.1	3879.5	3900.9	3918.3	3943.7	3967.1	3971.2	3978.2
10°	3736.1	3727.0	3762.6	3802.2	3869.4	3927.4	3965.0	3994.5	4019.9	4024.0	4034.2
12.5°	3631.4	3620.2	3659.9	3713.8	3822.6	3927.4	4006.7	4045.4	4067.7	4080.9	4096.2
15°	3614.0	3604.9	3627.3	3674.1	3764.6	3899.9	4035.2	4106.4	4125.7	4141.0	4147.0
17.5°	3697.5	3680.2	3689.4	3705.7	3758.6	3874.5	4057.6	4175.5	4205.1	4221.4	4221.4
20°	3890.8	3866.3	3852.2	3819.6	3810.4	3878.6	4055.5	4259.0	4297.6	4318.0	4323.0
22.5°	4148.1	4131.9	4101.3	4018.9	3929.4	3928.4	4094.2	4365.8	4438.0	4457.3	4445.1
25°	4459.4	4435.0	4396.3	4284.4	4112.5	4027.0	4159.3	4502.1	4623.2	4628.2	4592.6
27.5°	4817.4	4780.8	4727.9	4580.4	4348.5	4181.7	4259.0	4658.7	4835.7	4833.7	4760.5
30°	5194.8	5158.2	5102.2	4923.2	4631.3	4390.2	4397.4	4827.5	5088.0	5076.8	4951.7
32.5°	5470.4	5443.0	5431.8	5293.5	4956.8	4636.4	4556.0	5014.7	5399.3	5389.0	5214.2
35°	5682.0	5646.4	5659.6	5589.4	5311.8	4912.0	4750.3	5237.5	5777.6	5776.6	5559.0
37.5°	5891.6	5860.0	5871.2	5824.5	5640.4	5261.9	4987.3	5510.1	6246.6	6269.0	5976.0
40°	6082.8	6049.2	6094.0	6050.3	5895.7	5634.2	5256.8	5818.3	6789.8	6832.4	6480.6
42.5°	6197.8	6171.3	6245.5	6246.6	6117.4	5948.6	5552.8	6158.1	7418.3	7514.0	7101.0
45°	6237.4	6228.3	6340.1	6363.5	6313.7	6130.6	5819.3	6528.3	8095.9	8266.7	7807.9
47.5°	6194.7	6177.4	6332.0	6418.4	6458.1	6216.1	6040.1	6929.1	8787.5	9037.7	8579.0
50°	5979.0	5945.5	6175.4	6357.5	6498.8	6272.0	6262.9	7391.9	9573.8	9847.5	9354.2
52.5°	5591.5	5566.1	5827.5	6143.8	6409.3	6299.4	6513.1	7897.5	10320.4	10674.5	10148.5
55°	5096.1	5062.6	5350.4	5763.4	6186.6	6290.3	6763.4	8463.0	11201.3	11560.4	10969.4
57.5°	4310.8	4243.7	4607.9	5096.1	5823.4	6279.2	7023.7	9025.5	12096.4	12526.7	11845.2
60°	3165.5	3065.8	3512.4	4091.2	5113.4	6170.3	7346.2	9656.2	13170.6	13558.2	12801.3
62.5°	1843.2	1785.1	2077.1	2617.2	3854.1	5529.5	7527.2	10389.6	14226.5	14633.3	13741.3
65°	1431.2	1414.9	1440.3	1482.0	2145.2	4140.0	6968.8	11104.6	15569.1	15854.0	14720.8
67.5°	1309.1	1296.9	1308.1	1229.8	1088.3	2305.9	5513.2	11285.8	17007.4	17180.3	15578.3
70°	1163.7	1149.4	1186.0	1118.9	856.5	1048.7	3562.2	10628.6	18151.8	18476.2	16230.4
72.5°	948.0	931.7	1017.2	986.7	721.2	673.4	1789.2	9067.3	18031.8	18705.1	15763.5
75°	728.3	719.1	820.9	846.3	587.9	529.9	858.5	6739.9	15868.2	16546.7	13585.7
77.5°	565.6	558.4	610.3	702.8	474.1	410.9	527.9	4275.3	11958.2	12077.2	9362.2
80°	424.1	403.8	451.6	544.2	369.2	300.1	358.0	2493.1	7558.8	6851.8	4074.9
82.5°	265.5	255.3	295.0	363.2	260.3	206.5	233.0	1377.3	3029.2	1784.1	786.3
85°	151.6	147.5	160.7	207.5	141.3	119.0	133.2	608.2	553.4	380.5	237.0
87.5°	61.0	59.0	73.3	92.6	51.9	43.8	46.7	146.5	122.1	113.0	78.3
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: P962914
 CATALOG NUMBER: NAV-SB2D-727-U-SL2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3860.3	3860.3	3860.3	3860.3	3860.3	3860.3	3860.3	3860.3	3860.3	3860.3	3860.3
2.5°	3871.4	3871.4	3857.2	3834.8	3809.4	3793.1	3766.7	3759.5	3732.1	3723.9	3737.2
5°	3918.3	3910.1	3866.3	3803.3	3716.9	3637.5	3550.0	3495.0	3417.8	3390.3	3410.7
7.5°	3977.2	3954.9	3879.5	3741.2	3560.1	3382.2	3197.1	3056.7	2922.4	2874.6	2880.7
10°	4031.1	3999.6	3871.4	3629.3	3316.1	3007.9	2712.9	2506.3	2349.7	2285.6	2299.9
12.5°	4085.0	4027.0	3817.5	3443.2	2969.2	2551.1	2236.8	2076.1	1979.5	1902.2	1927.6
15°	4135.9	4054.5	3734.1	3194.0	2588.7	2164.6	1932.6	1804.5	1727.2	1676.3	1685.5
17.5°	4194.9	4078.0	3609.0	2877.7	2226.6	1897.1	1707.9	1630.6	1615.3	1609.1	1613.2
20°	4277.3	4099.3	3444.2	2523.7	1960.1	1683.5	1585.8	1578.7	1577.7	1574.6	1584.8
22.5°	4365.8	4124.7	3226.5	2202.2	1733.3	1550.2	1532.9	1518.6	1509.5	1508.5	1519.7
25°	4470.5	4132.9	2953.9	1938.8	1540.1	1487.2	1466.8	1445.5	1439.3	1439.3	1445.5
27.5°	4572.3	4105.4	2636.6	1709.9	1431.2	1429.2	1402.7	1395.5	1394.6	1397.6	1405.8
30°	4674.0	4053.5	2321.2	1498.3	1368.2	1368.2	1358.9	1364.1	1368.2	1378.3	1385.4
32.5°	4811.3	3998.6	2057.8	1341.7	1313.2	1303.0	1312.2	1322.4	1326.5	1339.7	1350.8
35°	5012.8	3959.9	1848.3	1256.2	1256.2	1243.0	1248.1	1246.1	1236.9	1230.8	1245.1
37.5°	5279.3	3957.9	1675.4	1216.6	1208.5	1206.4	1207.4	1194.2	1158.6	1115.8	1116.8
40°	5599.7	4012.8	1542.1	1189.1	1183.0	1195.1	1189.1	1153.5	1055.9	981.5	979.6
42.5°	6029.9	4169.5	1456.6	1155.5	1173.8	1189.1	1164.7	1041.6	975.5	925.7	923.6
45°	6536.5	4423.8	1412.9	1119.9	1156.5	1174.9	1056.9	1003.0	950.1	890.0	886.0
47.5°	7110.2	4744.2	1402.7	1086.4	1117.9	1129.0	1011.1	986.7	926.7	861.5	856.5
50°	7734.8	5123.6	1430.2	1046.7	1061.9	1023.3	995.8	973.4	911.4	847.4	840.2
52.5°	8380.6	5541.7	1485.1	992.8	1006.0	963.3	989.7	970.4	902.2	815.8	809.6
55°	9015.4	5962.7	1538.0	929.7	949.0	909.4	972.4	958.2	860.6	762.9	757.8
57.5°	9660.3	6381.9	1589.9	873.8	894.1	857.5	944.9	925.7	813.7	714.1	712.1
60°	10330.6	6788.8	1614.3	819.9	834.1	809.6	903.2	869.7	760.9	664.2	661.1
62.5°	10958.2	7127.4	1574.6	766.0	775.1	765.0	848.3	803.6	708.0	608.2	607.3
65°	11587.8	7328.9	1452.5	713.1	715.0	710.0	771.0	732.4	646.0	559.4	553.4
67.5°	12158.6	7441.8	1258.3	656.1	651.0	648.9	698.8	655.1	585.9	510.7	504.5
70°	12279.5	7154.9	961.2	589.0	589.0	583.8	619.5	574.7	519.8	458.8	456.7
72.5°	11215.6	6018.7	682.5	512.7	520.8	510.7	540.2	502.5	452.6	411.9	399.7
75°	9043.9	4413.5	496.4	434.3	448.5	431.3	458.8	432.3	389.6	388.6	349.9
77.5°	6214.1	2729.2	360.1	358.0	368.2	345.8	377.4	363.2	324.5	307.2	287.8
80°	2651.8	1088.3	262.4	276.6	276.6	256.4	292.9	297.0	263.4	255.3	255.3
82.5°	527.9	309.2	184.1	190.2	179.1	172.9	207.5	229.9	317.3	353.0	353.9
85°	158.7	113.9	110.9	103.7	91.5	92.6	122.1	230.9	284.8	162.8	140.3
87.5°	43.8	28.5	29.5	23.4	19.4	25.4	41.7	175.0	95.6	40.7	34.5
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)