

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: P965129

Luminaire Tested: **NAV-SB3D-740-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P965129
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-740-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33553.4 lumens
Efficiency: N/A
Efficacy: 153.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

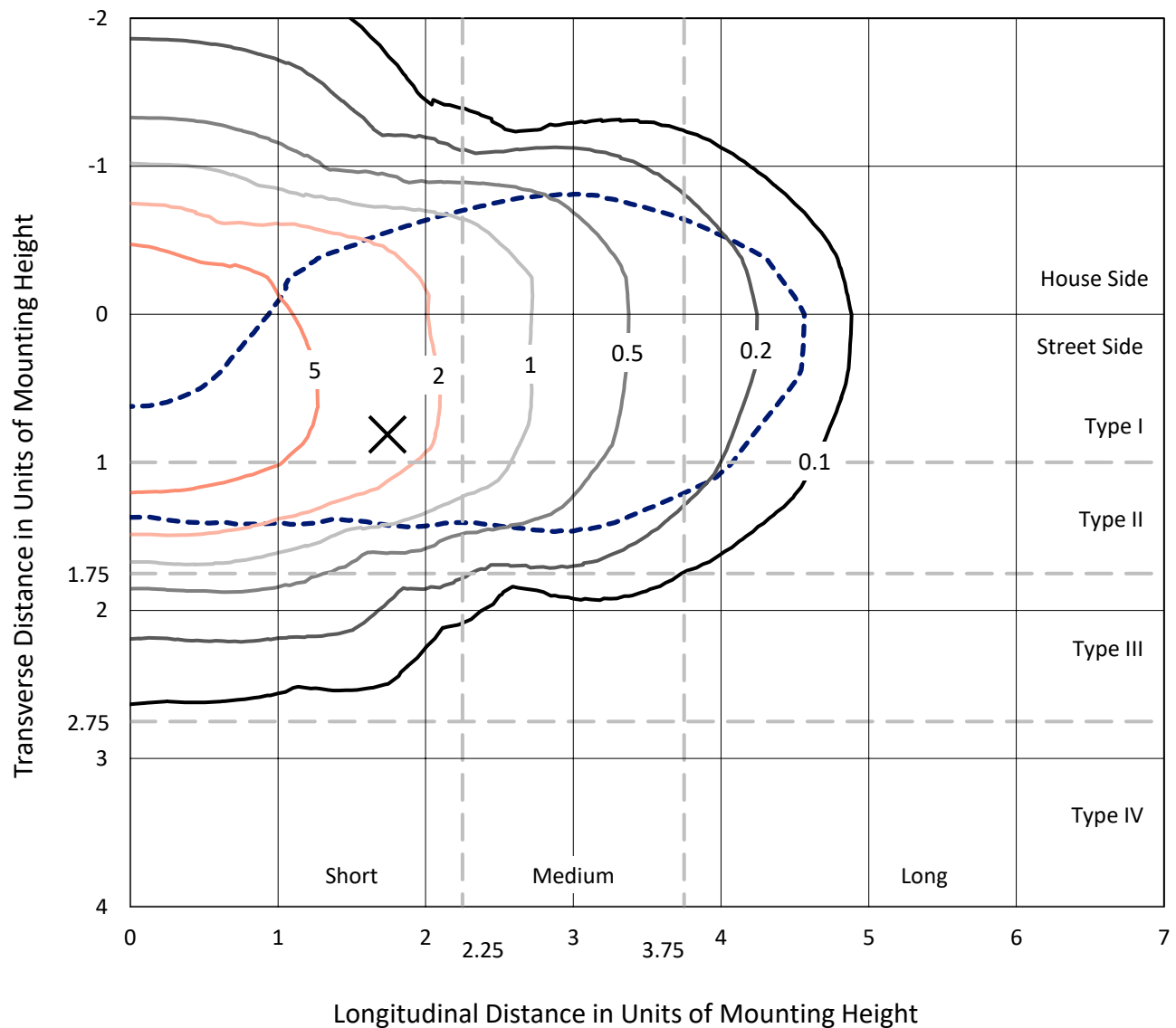
Input Watts (W): 218.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P965129
 CATALOG NUMBER: NAV-SB3D-740-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

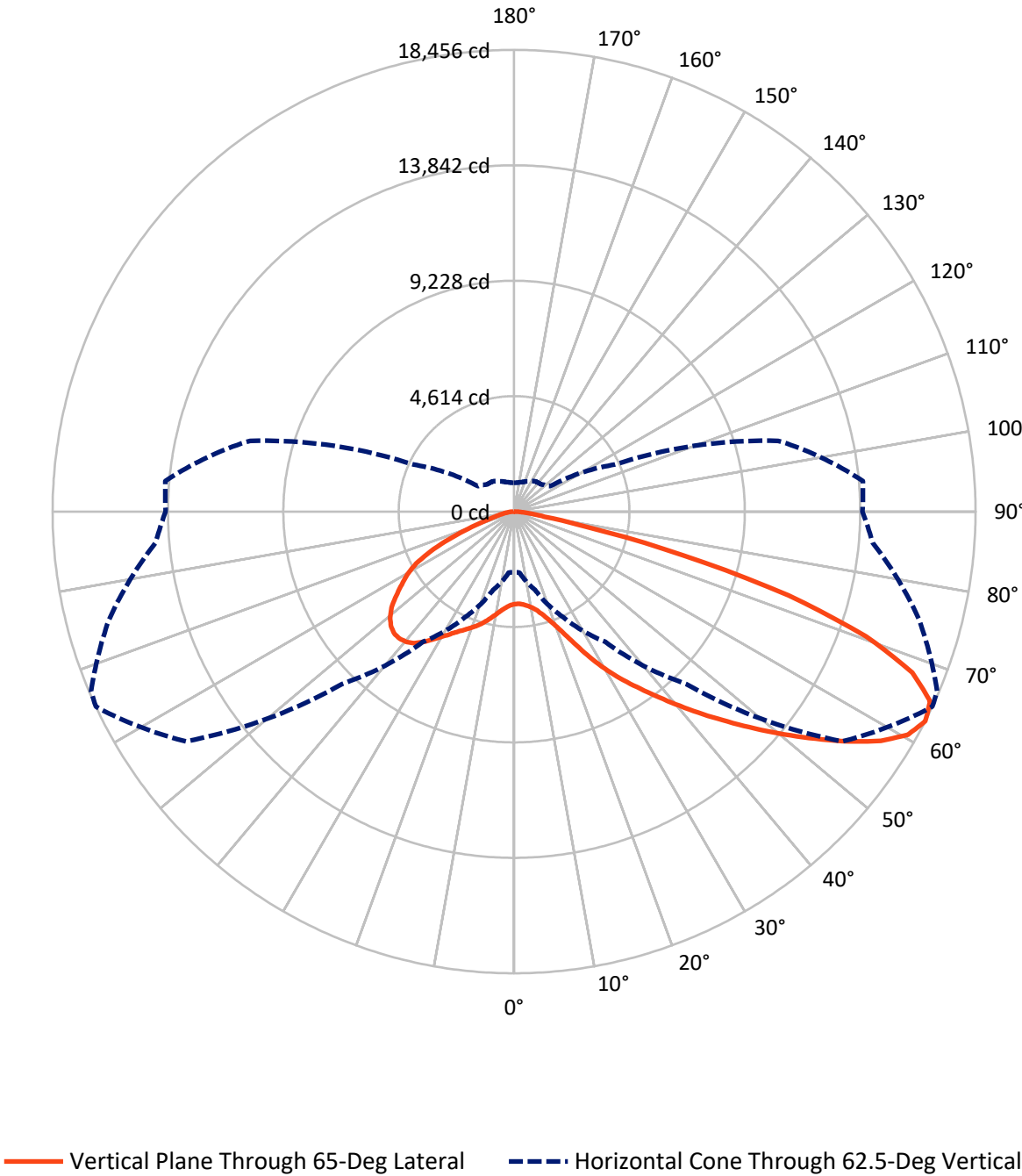
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.4 fc
 Type II - Short - N/A

REPORT NUMBER: P965129
CATALOG NUMBER: NAV-SB3D-740-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P965129

CATALOG NUMBER: NAV-SB3D-740-U-T2U

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10588.0	0.0	10588.0
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	22965.4	0.0	22965.4
	% Fixture	68.4	0.0	68.4
Total	Lumens	33553.4	0.0	33553.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	368.6	1.1
10°-20°	1250.1	3.7
20°-30°	2534.6	7.6
30°-40°	4386.1	13.1
40°-50°	6637.6	19.8
50°-60°	7782.1	23.2
60°-70°	6524.4	19.4
70°-80°	3602.0	10.7
80°-90°	467.9	1.4
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°	33553.4	100.0
0°-180°	33553.4	100.0

Coefficient of Utilization



REPORT NUMBER: P965129

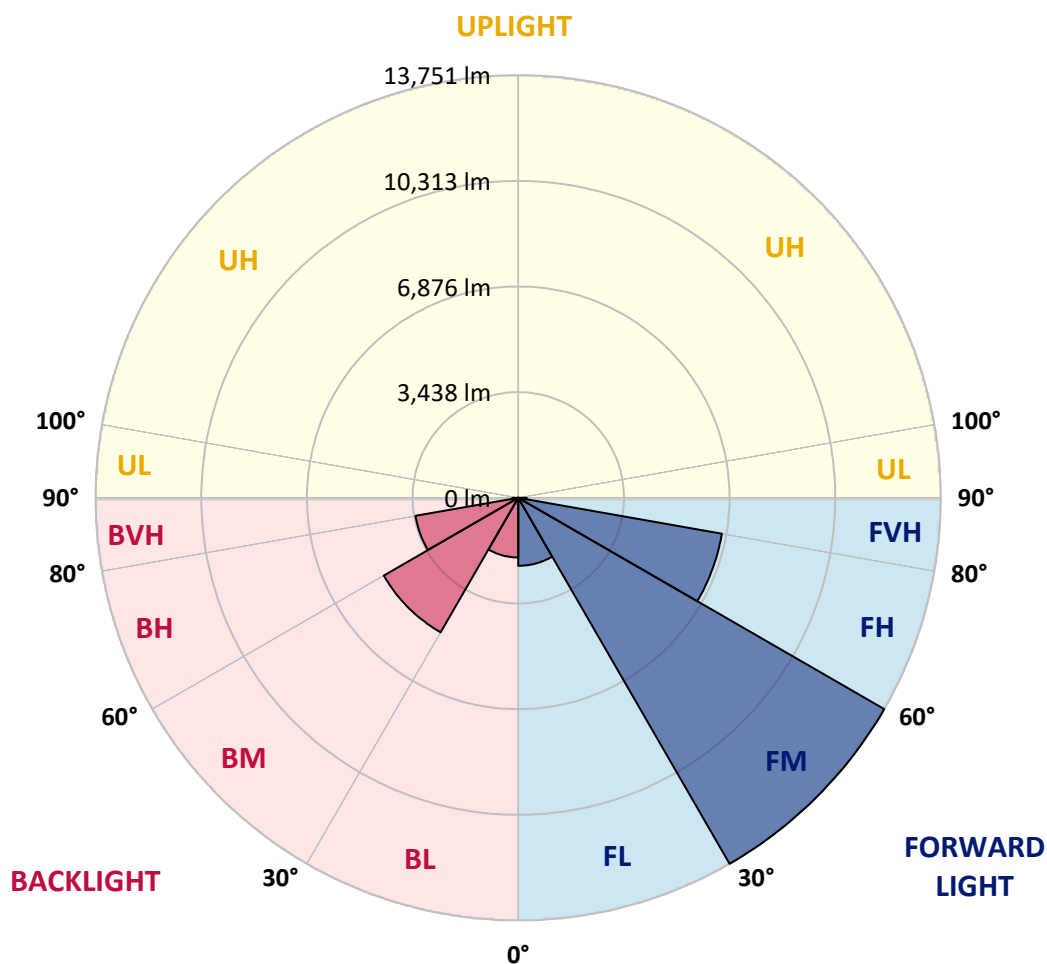
CATALOG NUMBER: NAV-SB3D-740-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2211.6	6.6			
FM	(30°-60°)	13751.3	41.0			
FH	(60°-80°)	6729.8	20.1			G3/7500
FVH	(80°-90°)	272.7	0.8			G3/500
BL	(0°-30°)	1941.7	5.8	B3/2500		
BM	(30°-60°)	5054.6	15.1	B4/8500		
BH	(60°-80°)	3396.5	10.1	B4/5000		G4/5000
BVH	(80°-90°)	195.2	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short



REPORT NUMBER: P965129

CATALOG NUMBER: NAV-SB3D-740-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3697.5	3697.5	3697.5	3697.5	3697.5	3697.5	3697.5	3697.5	3697.5	3697.5	3697.5
2.5°	3673.1	3662.6	3671.3	3671.3	3674.8	3673.1	3685.3	3688.8	3694.0	3704.3	3704.3
5°	3636.5	3634.8	3650.4	3664.4	3678.3	3690.5	3706.1	3728.7	3732.2	3744.4	3760.1
7.5°	3624.3	3613.8	3638.2	3655.7	3688.8	3718.3	3760.1	3798.4	3814.0	3819.3	3848.9
10°	3718.3	3701.0	3723.5	3734.0	3761.9	3791.5	3840.2	3901.2	3918.5	3939.4	3972.5
12.5°	3878.5	3859.3	3892.4	3908.1	3934.2	3960.3	3993.4	4052.5	4061.3	4099.6	4130.9
15°	4097.8	4075.2	4096.1	4115.3	4158.7	4183.1	4216.2	4273.6	4273.6	4303.3	4325.9
17.5°	4395.5	4365.9	4381.6	4388.5	4416.4	4452.9	4508.7	4559.1	4585.2	4574.8	4543.4
20°	4839.4	4802.8	4802.8	4768.0	4757.5	4787.2	4860.2	4929.9	4957.7	4903.8	4827.2
22.5°	5506.1	5453.9	5424.3	5305.9	5259.0	5262.5	5335.5	5420.8	5443.5	5347.7	5175.3
25°	6353.9	6272.1	6232.0	6058.0	5951.8	5859.5	5916.9	6026.6	6058.0	5939.6	5661.1
27.5°	7201.6	7206.9	7168.5	6959.6	6783.9	6615.0	6585.4	6700.3	6733.3	6599.4	6254.7
30°	8390.6	8267.0	8193.8	7943.2	7692.5	7455.8	7334.0	7380.9	7389.6	7229.5	6829.2
32.5°	9416.0	9384.6	9228.0	9008.6	8686.6	8315.7	8112.1	8037.2	8023.3	7795.2	7320.0
35°	10584.0	10566.6	10401.2	10140.1	9791.9	9276.7	8909.4	8695.3	8677.9	8357.5	7805.7
37.5°	11771.2	11771.2	11609.4	11323.8	10963.5	10319.4	9760.6	9421.2	9365.4	8947.6	8300.0
40°	12718.2	12660.8	12690.3	12570.2	12157.6	11473.5	10705.8	10213.2	10138.4	9637.0	8825.8
42.5°	13256.1	13237.0	13414.5	13548.6	13379.7	12833.1	11746.8	11071.4	10967.0	10396.0	9431.6
45°	13376.2	13355.3	13672.2	14163.0	14399.8	14175.2	12878.4	11974.9	11847.8	11189.8	10080.9
47.5°	13099.4	13057.7	13522.4	14297.1	15056.1	15451.3	14103.9	12955.0	12770.5	11962.7	10747.6
50°	12267.3	12227.3	12930.6	13959.4	15277.2	16318.2	15433.8	13994.2	13712.2	12791.3	11421.3
52.5°	10458.7	10477.9	11579.7	12993.2	14986.4	16857.8	16579.3	15089.1	14749.7	13639.1	12053.2
55°	8146.9	8188.6	9543.1	11099.3	13823.6	16776.0	17360.9	16217.2	15879.5	14436.4	12706.0
57.5°	5833.4	6017.9	7286.9	8827.5	11590.2	15479.1	17531.5	17289.5	16962.2	15306.7	13344.9
60°	3781.0	3814.0	5119.7	6672.4	8825.8	13174.3	17185.0	18102.4	17846.6	16194.6	13879.3
62.5°	2423.2	2445.9	3241.4	4667.0	6352.1	9746.7	16018.7	18455.8	18377.5	16781.2	14392.8
65°	1780.8	1763.4	2177.7	3084.6	4278.9	6010.9	13754.0	18285.3	18440.2	17148.6	14817.6
67.5°	1486.7	1462.3	1665.9	2136.0	3152.6	3413.7	10176.6	17176.3	17743.9	17106.7	15129.2
70°	1354.3	1333.4	1457.0	1585.9	2459.7	2285.6	5130.1	14932.5	15806.3	16631.5	15078.7
72.5°	1147.2	1110.6	1279.5	1408.2	1913.2	1753.0	2120.3	11470.1	12535.4	15108.3	14368.4
75°	889.5	865.2	1009.6	1239.4	1437.9	1368.3	1340.4	6964.9	8127.7	11684.2	12570.2
77.5°	705.0	672.0	804.2	966.2	1293.4	1032.3	976.6	2999.4	4151.8	7459.2	9405.5
80°	530.9	501.3	611.0	764.2	993.9	778.2	631.9	1223.7	1565.0	3779.3	4729.8
82.5°	377.7	351.7	426.5	560.6	668.5	698.0	388.2	685.8	771.2	1457.0	1056.7
85°	242.0	226.3	285.5	351.7	424.8	449.2	236.8	358.6	393.4	600.5	440.4
87.5°	132.3	107.9	153.2	163.6	196.7	179.3	113.2	130.6	141.0	217.6	186.2
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: P965129

CATALOG NUMBER: NAV-SB3D-740-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3697.5	3697.5	3697.5	3697.5	3697.5	3697.5	3697.5	3697.5	3697.5	3697.5	3697.5
2.5°	3711.3	3716.5	3734.0	3739.2	3751.4	3767.1	3777.5	3788.0	3788.0	3798.4	3798.4
5°	3761.9	3774.0	3810.5	3829.7	3861.1	3892.4	3911.5	3934.2	3948.1	3955.1	3958.6
7.5°	3859.3	3878.5	3930.7	3963.8	4017.7	4061.3	4090.9	4122.1	4129.1	4148.3	4141.3
10°	3991.7	4014.3	4073.5	4136.1	4200.6	4254.5	4282.3	4305.0	4313.7	4317.2	4308.5
12.5°	4143.0	4176.2	4252.7	4329.3	4397.2	4444.2	4451.2	4445.9	4421.6	4400.7	4400.7
15°	4329.3	4358.9	4444.2	4527.8	4593.9	4602.7	4559.1	4531.3	4501.7	4496.5	4496.5
17.5°	4552.1	4567.8	4646.1	4728.0	4733.2	4703.6	4639.3	4613.1	4585.2	4566.1	4567.8
20°	4811.6	4806.3	4862.0	4896.8	4860.2	4769.7	4672.3	4628.8	4600.9	4578.3	4580.0
22.5°	5121.4	5081.3	5074.4	5065.7	4968.2	4778.4	4646.1	4590.5	4546.9	4515.6	4526.1
25°	5572.3	5419.1	5312.9	5253.7	5034.4	4731.5	4562.6	4439.0	4357.2	4303.3	4324.2
27.5°	6136.3	5878.7	5610.5	5466.1	5034.4	4635.8	4360.7	4160.5	4026.4	3970.7	3998.6
30°	6674.2	6404.4	6009.2	5722.0	5022.2	4479.0	4035.1	3756.6	3599.9	3544.2	3577.4
32.5°	7133.8	6839.5	6432.2	6002.2	4992.6	4224.8	3631.3	3323.2	3171.8	3105.5	3138.7
35°	7560.3	7247.0	6856.9	6310.3	4914.3	3852.4	3187.3	2952.4	2783.5	2677.3	2712.1
37.5°	7997.2	7624.7	7259.0	6588.9	4773.2	3417.1	2846.2	2646.0	2447.6	2304.8	2343.1
40°	8472.4	8026.8	7689.0	6754.2	4541.7	3002.8	2581.6	2398.8	2188.2	2036.7	2066.3
42.5°	9027.7	8508.9	8167.8	6839.5	4224.8	2708.7	2409.3	2230.0	2031.5	1907.9	1932.2
45°	9607.4	9039.9	8604.8	6837.8	3871.5	2571.1	2353.5	2176.0	1956.6	1827.8	1848.7
47.5°	10214.9	9595.2	8982.5	6726.5	3565.2	2590.3	2322.2	2059.3	1817.4	1692.1	1709.5
50°	10824.2	10202.7	9348.0	6517.6	3434.6	2548.6	2205.6	1895.7	1610.3	1497.1	1504.1
52.5°	11428.2	10848.6	9663.1	6219.8	3302.2	2393.6	2055.8	1683.4	1524.9	1446.6	1446.6
55°	12035.9	11487.5	10006.0	5786.4	2971.6	2212.6	1805.2	1603.3	1457.0	1385.7	1378.7
57.5°	12645.1	12225.6	10331.6	5353.0	2555.4	1989.7	1667.7	1505.8	1389.2	1328.2	1317.7
60°	13278.8	13069.9	10667.6	4954.3	2144.6	1704.3	1566.7	1427.4	1309.0	1241.2	1235.9
62.5°	13931.5	13999.4	10930.4	4440.7	1766.9	1530.1	1476.2	1333.4	1218.5	1154.1	1152.4
65°	14589.5	14895.9	11102.8	3728.7	1432.6	1364.8	1378.7	1230.7	1114.1	1058.4	1056.7
67.5°	15085.6	15541.8	11054.0	2821.8	1175.1	1208.1	1256.9	1122.8	1013.1	969.6	971.4
70°	15141.4	15465.2	10573.6	1932.2	983.6	1054.9	1121.0	1016.6	903.4	872.2	873.9
72.5°	14399.8	14420.7	9234.8	1262.1	832.1	926.1	978.4	908.7	799.0	767.7	766.0
75°	12455.4	11926.2	6780.4	832.1	696.3	795.5	844.3	795.5	689.3	696.3	672.0
77.5°	9436.9	8446.3	4117.0	591.8	581.4	668.5	734.6	699.8	609.3	684.1	602.3
80°	4862.0	4569.6	1836.5	442.2	459.6	534.4	604.0	558.8	482.2	459.6	419.5
82.5°	1114.1	1295.2	724.2	316.8	332.5	384.7	461.4	419.5	346.4	292.4	288.9
85°	389.9	426.5	320.3	198.4	195.0	240.3	313.3	280.2	235.0	188.0	198.4
87.5°	123.6	161.8	120.1	80.1	83.5	107.9	144.5	132.3	109.7	71.3	74.8
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)