

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: P968973

Luminaire Tested: **NAV-SB5C-835-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968973
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-SB5C-835-U-T2U
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36449 lumens
Efficiency: N/A
Efficacy: 146.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

Input Watts (W): 249.5
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

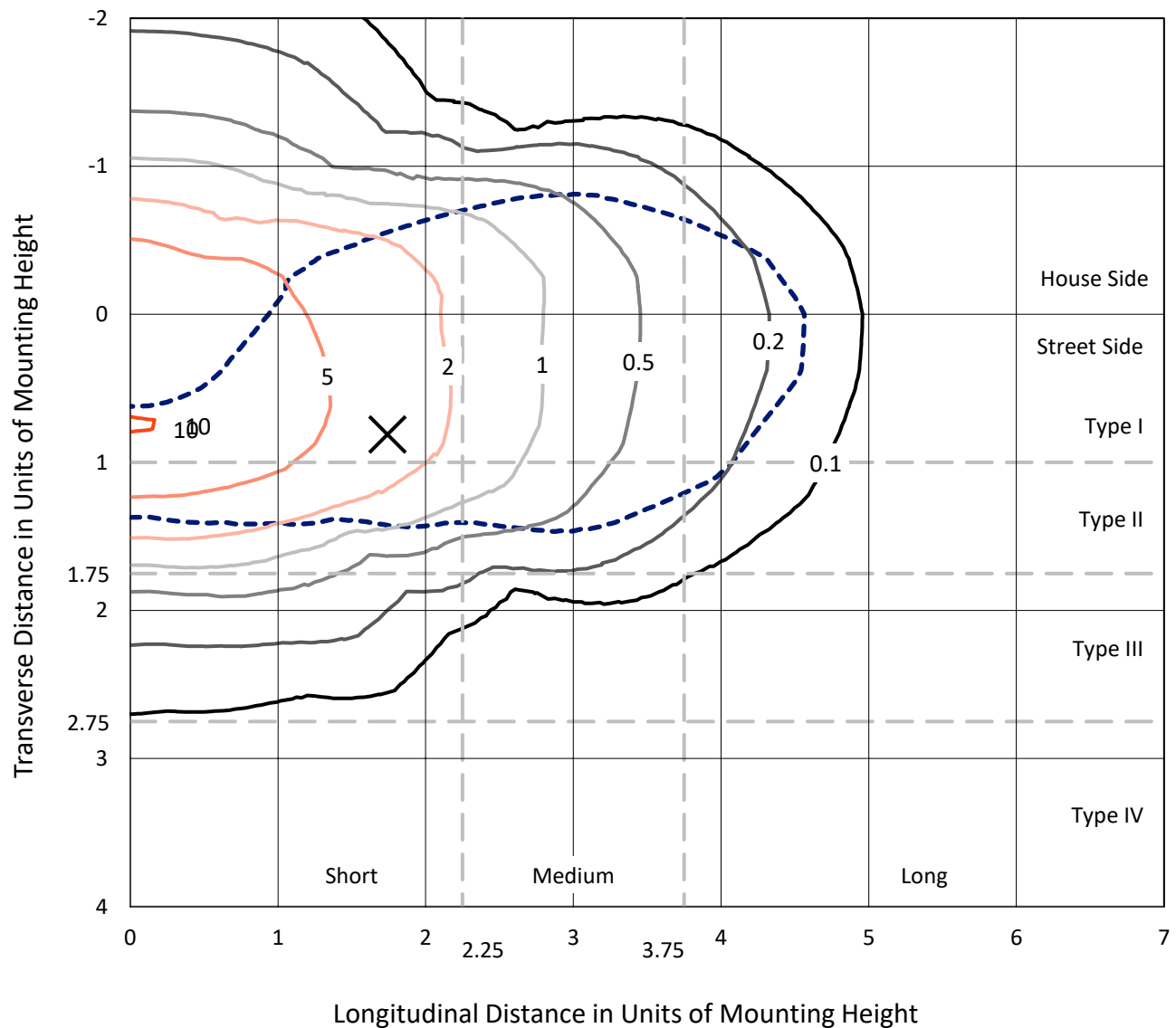


REPORT NUMBER: P968973

CATALOG NUMBER: NAV-SB5C-835-U-T2U

Iso-Footcandle Lines of Horizontal Illumination

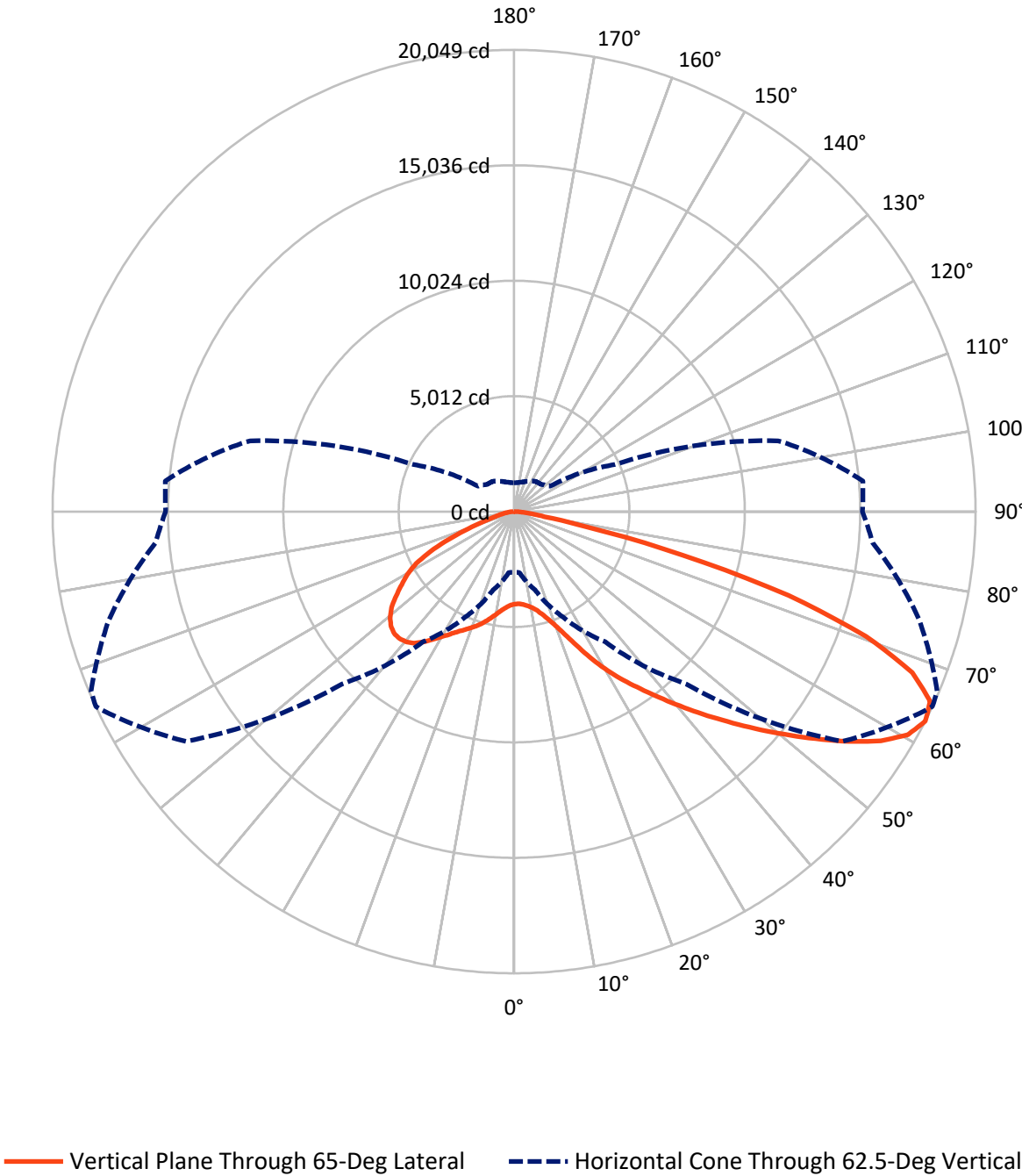
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.2 fc
Type II - Short - N/A

REPORT NUMBER: P968973
CATALOG NUMBER: NAV-SB5C-835-U-T2U

Luminous Intensity Polar Plot



REPORT NUMBER: P968973

CATALOG NUMBER: NAV-SB5C-835-U-T2U

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11501.7	0.0	11501.7
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	24947.3	0.0	24947.3
	% Fixture	68.4	0.0	68.4
Total	Lumens	36449.0	0.0	36449.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	400.4	1.1
10°-20°	1357.9	3.7
20°-30°	2753.4	7.6
30°-40°	4764.6	13.1
40°-50°	7210.4	19.8
50°-60°	8453.7	23.2
60°-70°	7087.4	19.4
70°-80°	3912.8	10.7
80°-90°	508.3	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°	36449.0	100.0
0°-180°	36449.0	100.0

Coefficient of Utilization



REPORT NUMBER: P968973

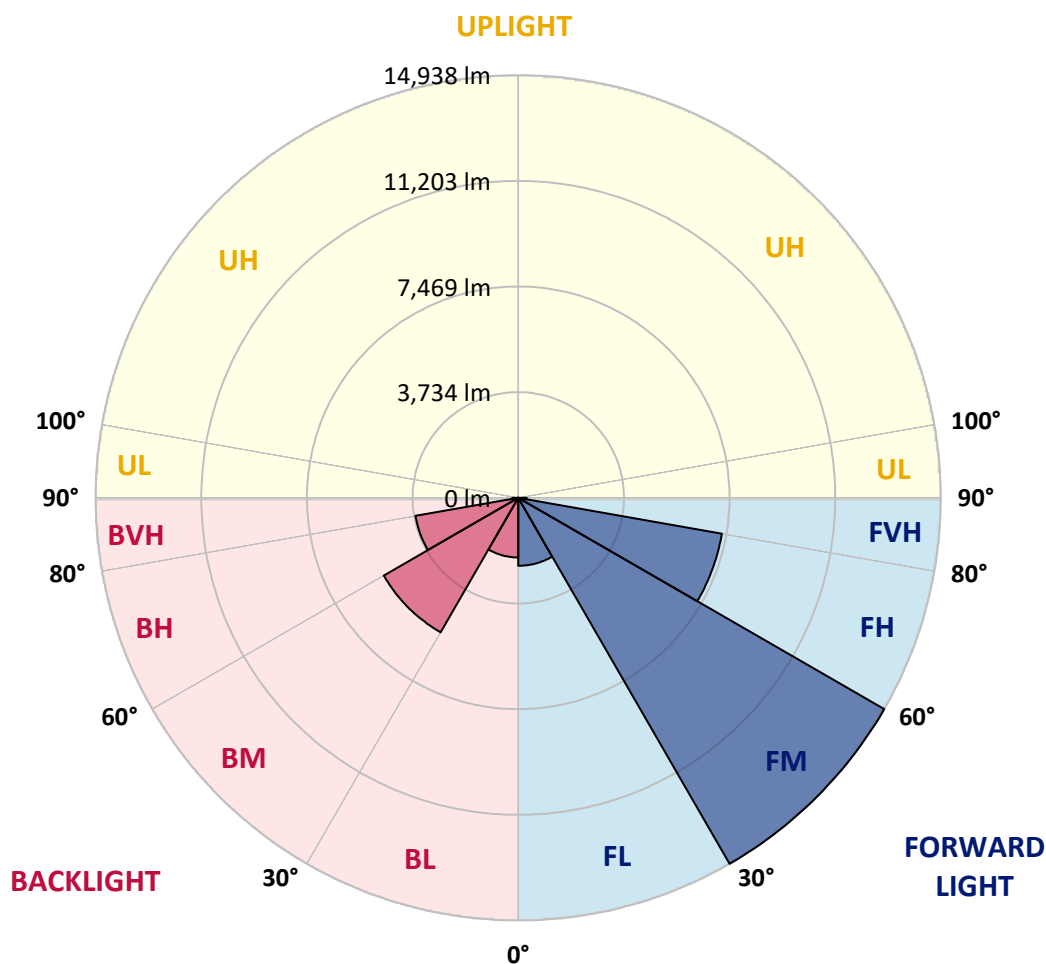
CATALOG NUMBER: NAV-SB5C-835-U-T2U

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2402.5	6.6			
FM	(30°-60°)	14938.0	41.0			
FH	(60°-80°)	7310.6	20.1			G3/7500
FVH	(80°-90°)	296.2	0.8			G3/500
BL	(0°-30°)	2109.3	5.8	B3/2500		
BM	(30°-60°)	5490.7	15.1	B4/8500		
BH	(60°-80°)	3689.7	10.1	B4/5000		G4/5000
BVH	(80°-90°)	212.0	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: P968973

CATALOG NUMBER: NAV-SB5C-835-U-T2U

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	4016.6	4016.6	4016.6	4016.6	4016.6	4016.6	4016.6	4016.6	4016.6	4016.6	4016.6
2.5°	3990.0	3978.7	3988.2	3988.2	3992.0	3990.0	4003.2	4007.0	4012.8	4024.0	4024.0
5°	3950.3	3948.4	3965.4	3980.6	3995.8	4009.0	4026.0	4050.6	4054.4	4067.6	4084.6
7.5°	3937.1	3925.7	3952.2	3971.2	4007.0	4039.2	4084.6	4126.2	4143.3	4148.9	4181.1
10°	4039.2	4020.3	4044.9	4056.2	4086.5	4118.7	4171.5	4237.8	4256.7	4279.4	4315.4
12.5°	4213.2	4192.4	4228.3	4245.3	4273.7	4302.0	4338.0	4402.3	4411.7	4453.3	4487.3
15°	4451.5	4426.9	4449.5	4470.3	4517.7	4544.1	4580.0	4642.4	4642.4	4674.6	4699.2
17.5°	4774.9	4742.7	4759.7	4767.3	4797.5	4837.2	4897.8	4952.6	4981.0	4969.6	4935.6
20°	5257.0	5217.4	5217.4	5179.5	5168.2	5200.3	5279.7	5355.3	5385.7	5327.0	5243.8
22.5°	5981.3	5924.6	5892.4	5763.8	5712.7	5716.5	5796.0	5888.6	5913.2	5809.2	5622.0
25°	6902.2	6813.4	6769.8	6580.7	6465.4	6365.1	6427.6	6546.7	6580.7	6452.2	6149.6
27.5°	7823.1	7828.8	7787.2	7560.3	7369.3	7185.9	7153.7	7278.5	7314.5	7168.8	6794.4
30°	9114.7	8980.4	8901.0	8628.8	8356.4	8099.2	7966.8	8018.0	8027.4	7853.4	7418.4
32.5°	10228.5	10194.4	10024.3	9786.0	9436.2	9033.4	8812.1	8730.8	8715.7	8467.9	7951.7
35°	11497.4	11478.5	11298.8	11015.2	10636.9	10077.2	9678.3	9445.7	9426.7	9078.7	8479.3
37.5°	12787.1	12787.1	12611.2	12301.0	11909.7	11209.9	10602.9	10234.2	10173.6	9719.9	9016.4
40°	13815.8	13753.3	13785.5	13655.0	13206.8	12463.7	11629.8	11094.6	11013.3	10468.6	9587.4
42.5°	14400.1	14379.3	14572.2	14717.8	14534.4	13940.6	12760.6	12026.8	11913.4	11293.1	10245.5
45°	14530.6	14507.8	14852.0	15385.4	15642.5	15398.6	13989.7	13008.3	12870.3	12155.5	10950.9
47.5°	14229.9	14184.6	14689.4	15530.9	16355.4	16784.7	15321.0	14072.9	13872.6	12995.1	11675.2
50°	13326.0	13282.5	14046.5	15164.1	16595.6	17726.4	16765.7	15201.9	14895.5	13895.2	12407.0
52.5°	11361.2	11382.0	12579.0	14114.6	16279.8	18312.6	18010.1	16391.4	16022.6	14816.2	13093.5
55°	8850.0	8895.4	10366.5	12057.2	15016.6	18223.8	18859.1	17616.7	17249.8	15682.2	13802.5
57.5°	6336.8	6537.2	7915.8	9589.4	12590.4	16814.9	19044.4	18781.6	18426.1	16627.8	14496.6
60°	4107.3	4143.3	5561.4	7248.3	9587.4	14311.3	18668.1	19664.7	19386.7	17592.2	15077.1
62.5°	2632.3	2656.9	3521.1	5069.9	6900.3	10587.8	17401.1	20048.6	19963.5	18229.4	15634.9
65°	1934.5	1915.6	2365.7	3350.9	4648.2	6529.7	14940.9	19863.3	20031.6	18628.5	16096.3
67.5°	1614.9	1588.4	1809.7	2320.3	3424.6	3708.2	11054.9	18658.7	19275.1	18583.0	16434.8
70°	1471.2	1448.5	1582.8	1722.7	2672.0	2482.9	5572.8	16221.1	17170.5	18066.8	16380.0
72.5°	1246.2	1206.4	1389.9	1529.8	2078.2	1904.2	2303.3	12459.9	13617.2	16412.1	15608.5
75°	966.3	939.8	1096.8	1346.4	1562.0	1486.4	1456.1	7565.9	8829.1	12692.5	13655.0
77.5°	765.9	729.9	873.6	1049.5	1405.1	1121.4	1060.9	3258.3	4510.1	8103.0	10217.2
80°	576.8	544.6	663.8	830.1	1079.7	845.3	686.4	1329.4	1700.1	4105.4	5137.9
82.5°	410.3	382.0	463.3	609.0	726.1	758.3	421.7	745.1	837.7	1582.8	1147.9
85°	262.8	245.8	310.2	382.0	461.5	487.9	257.2	389.5	427.3	652.4	478.5
87.5°	143.7	117.3	166.5	177.7	213.7	194.7	122.9	141.9	153.1	236.4	202.3
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: P968973

CATALOG NUMBER: NAV-SB5C-835-U-T2U

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4016.6	4016.6	4016.6	4016.6	4016.6	4016.6	4016.6	4016.6	4016.6	4016.6	4016.6
2.5°	4031.6	4037.4	4056.2	4061.9	4075.1	4092.2	4103.5	4114.9	4114.9	4126.2	4126.2
5°	4086.5	4099.7	4139.5	4160.3	4194.3	4228.3	4249.1	4273.7	4288.8	4296.4	4300.2
7.5°	4192.4	4213.2	4269.9	4305.8	4364.4	4411.7	4443.9	4477.9	4485.5	4506.3	4498.7
10°	4336.1	4360.7	4425.0	4493.1	4563.0	4621.6	4651.9	4676.5	4686.0	4689.7	4680.3
12.5°	4500.7	4536.5	4619.8	4703.0	4776.7	4827.8	4835.3	4829.7	4803.2	4780.5	4780.5
15°	4703.0	4735.1	4827.8	4918.6	4990.4	4999.8	4952.6	4922.4	4890.2	4884.5	4884.5
17.5°	4945.0	4962.0	5047.1	5136.0	5141.7	5109.5	5039.5	5011.2	4981.0	4960.2	4962.0
20°	5226.8	5221.1	5281.6	5319.4	5279.7	5181.4	5075.5	5028.2	4998.0	4973.4	4975.2
22.5°	5563.4	5519.8	5512.3	5502.8	5396.9	5190.8	5047.1	4986.6	4939.4	4905.3	4916.6
25°	6053.1	5886.8	5771.4	5707.1	5468.8	5139.8	4956.4	4822.1	4733.2	4674.6	4697.3
27.5°	6665.9	6386.0	6094.8	5937.8	5468.8	5035.8	4737.0	4519.5	4373.9	4313.4	4343.6
30°	7250.1	6957.1	6527.8	6215.8	5455.6	4865.6	4383.4	4080.8	3910.6	3850.1	3886.1
32.5°	7749.4	7429.8	6987.3	6520.2	5423.5	4589.5	3944.7	3609.9	3445.4	3373.6	3409.5
35°	8212.7	7872.3	7448.7	6854.9	5338.3	4184.9	3462.4	3207.1	3023.7	2908.3	2946.2
37.5°	8687.3	8282.6	7885.5	7157.5	5185.2	3712.0	3091.8	2874.3	2658.7	2503.7	2545.3
40°	9203.6	8719.5	8352.6	7337.2	4933.6	3262.0	2804.4	2605.9	2377.0	2212.5	2244.6
42.5°	9806.8	9243.2	8872.6	7429.8	4589.5	2942.5	2617.1	2422.4	2206.8	2072.5	2099.0
45°	10436.6	9820.0	9347.3	7427.9	4205.6	2793.0	2556.7	2363.8	2125.5	1985.5	2008.3
47.5°	11096.4	10423.3	9757.7	7306.9	3872.8	2813.8	2522.6	2237.1	1974.3	1838.0	1857.0
50°	11758.4	11083.2	10154.8	7080.0	3731.0	2768.4	2395.9	2059.3	1749.2	1626.3	1633.8
52.5°	12414.5	11784.8	10497.0	6756.6	3587.3	2600.1	2233.3	1828.6	1656.5	1571.4	1571.4
55°	13074.5	12478.9	10869.6	6285.7	3227.9	2403.5	1961.0	1741.6	1582.8	1505.2	1497.7
57.5°	13736.3	13280.6	11223.2	5814.9	2776.0	2161.4	1811.6	1635.7	1509.0	1442.9	1431.5
60°	14424.7	14197.8	11588.1	5381.9	2329.7	1851.4	1701.9	1550.6	1422.1	1348.3	1342.6
62.5°	15133.8	15207.5	11873.7	4824.0	1919.4	1662.2	1603.6	1448.5	1323.7	1253.8	1251.8
65°	15848.7	16181.5	12060.9	4050.6	1556.3	1482.6	1497.7	1336.9	1210.2	1149.7	1147.9
67.5°	16387.6	16883.0	12008.0	3065.4	1276.4	1312.4	1365.3	1219.8	1100.5	1053.3	1055.2
70°	16448.1	16799.9	11486.0	2099.0	1068.5	1145.9	1217.8	1104.3	981.4	947.4	949.3
72.5°	15642.5	15665.2	10031.9	1370.9	903.9	1006.0	1062.7	987.1	868.0	833.9	832.1
75°	13530.2	12955.4	7365.5	903.9	756.4	864.2	917.2	864.2	748.9	756.4	729.9
77.5°	10251.2	9175.2	4472.3	643.0	631.6	726.1	798.0	760.1	661.8	743.1	654.3
80°	5281.6	4964.0	1995.1	480.3	499.3	580.6	656.2	607.0	523.8	499.3	455.7
82.5°	1210.2	1406.9	786.7	344.2	361.2	417.9	501.1	455.7	376.3	317.6	314.0
85°	423.6	463.3	348.0	215.6	211.8	261.0	340.4	304.4	255.3	204.2	215.6
87.5°	134.3	175.9	130.5	87.0	90.8	117.3	156.9	143.7	119.1	77.5	81.3
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)