

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: P883426

Luminaire Tested: **NAV-SB3D-735-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883426
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3D-735-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22288 lumens
Efficiency: N/A
Efficacy: 102.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

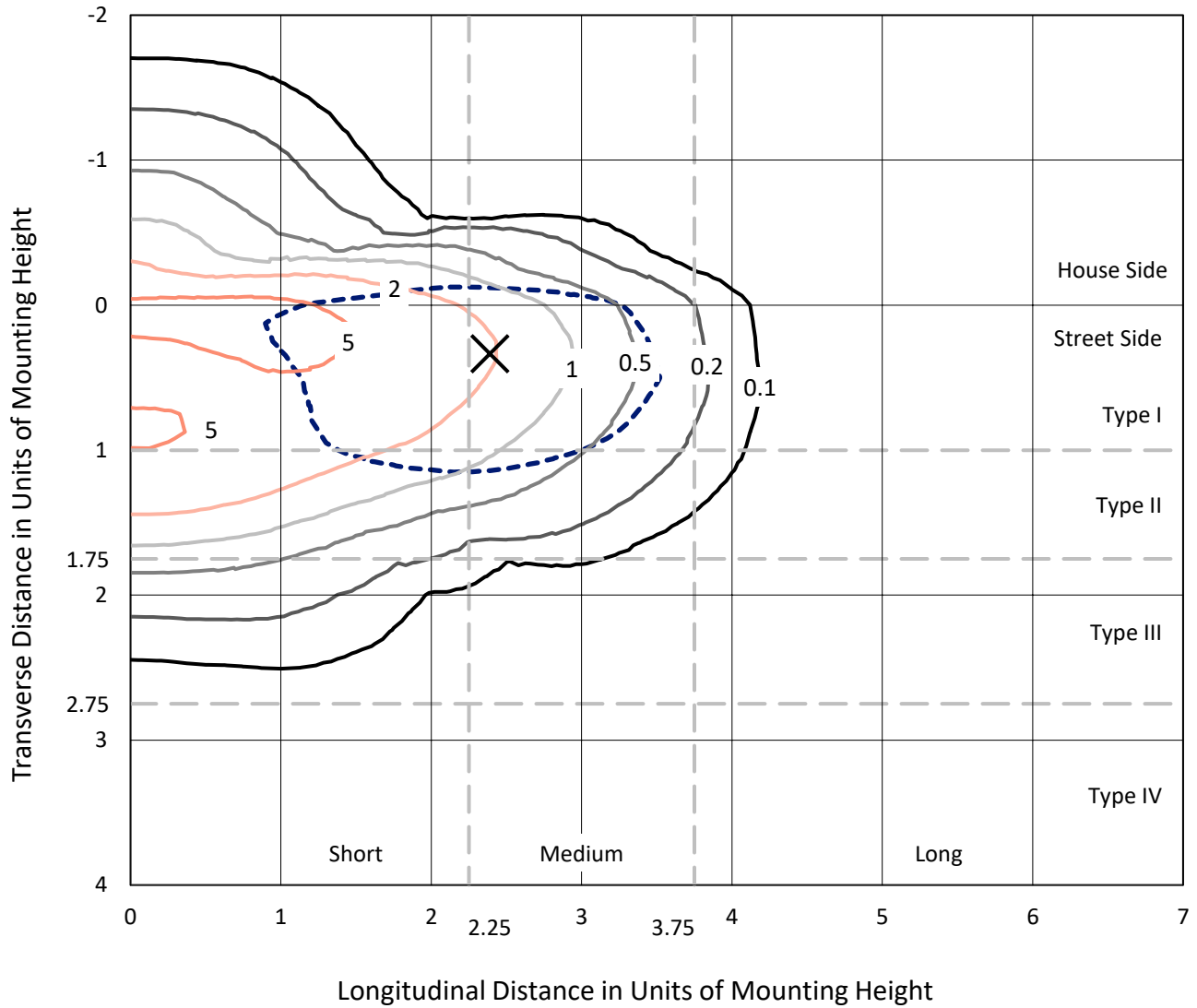
Input Watts (W): 218.1
Input Voltage (V): 120.0
Input Current (Ain): 1.84
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P883426
 CATALOG NUMBER: NAV-SB3D-735-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

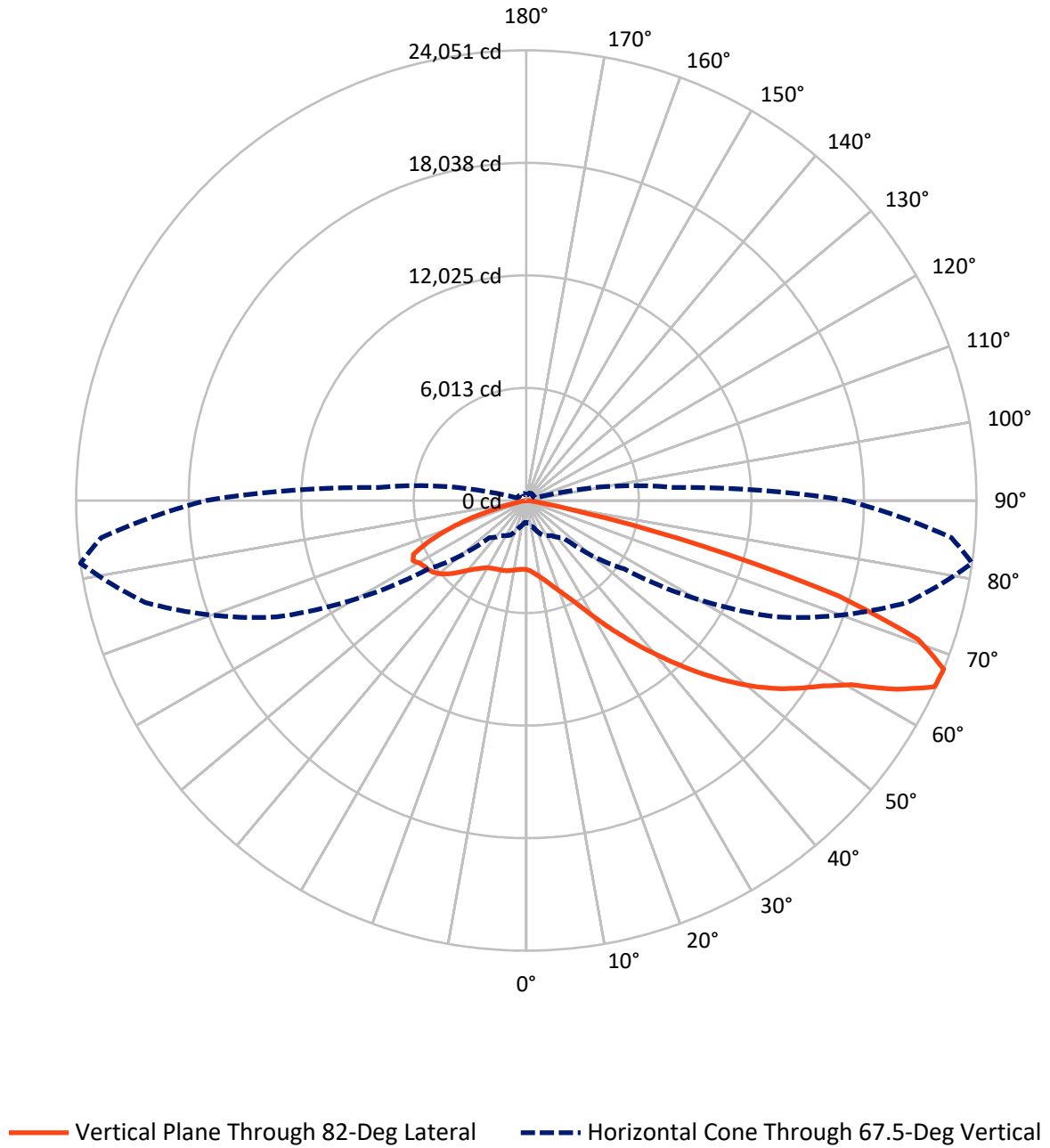
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 fc
 Type II - Medium - N/A

REPORT NUMBER: P883426
CATALOG NUMBER: NAV-SB3D-735-U-T2-HSS

Luminous Intensity Polar Plot



REPORT NUMBER: P883426

CATALOG NUMBER: NAV-SB3D-735-U-T2-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4037.3	0.0	4037.3
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	18250.7	0.0	18250.7
	% Fixture	81.9	0.0	81.9
Total	Lumens	22288.0	0.0	22288.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	329.0	1.5
10°-20°	854.8	3.8
20°-30°	1369.2	6.1
30°-40°	2421.1	10.9
40°-50°	4242.1	19.0
50°-60°	5657.7	25.4
60°-70°	5267.0	23.6
70°-80°	2021.5	9.1
80°-90°	125.6	0.6
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°	22288.0	100.0
0°-180°	22288.0	100.0

Coefficient of Utilization



REPORT NUMBER: P883426

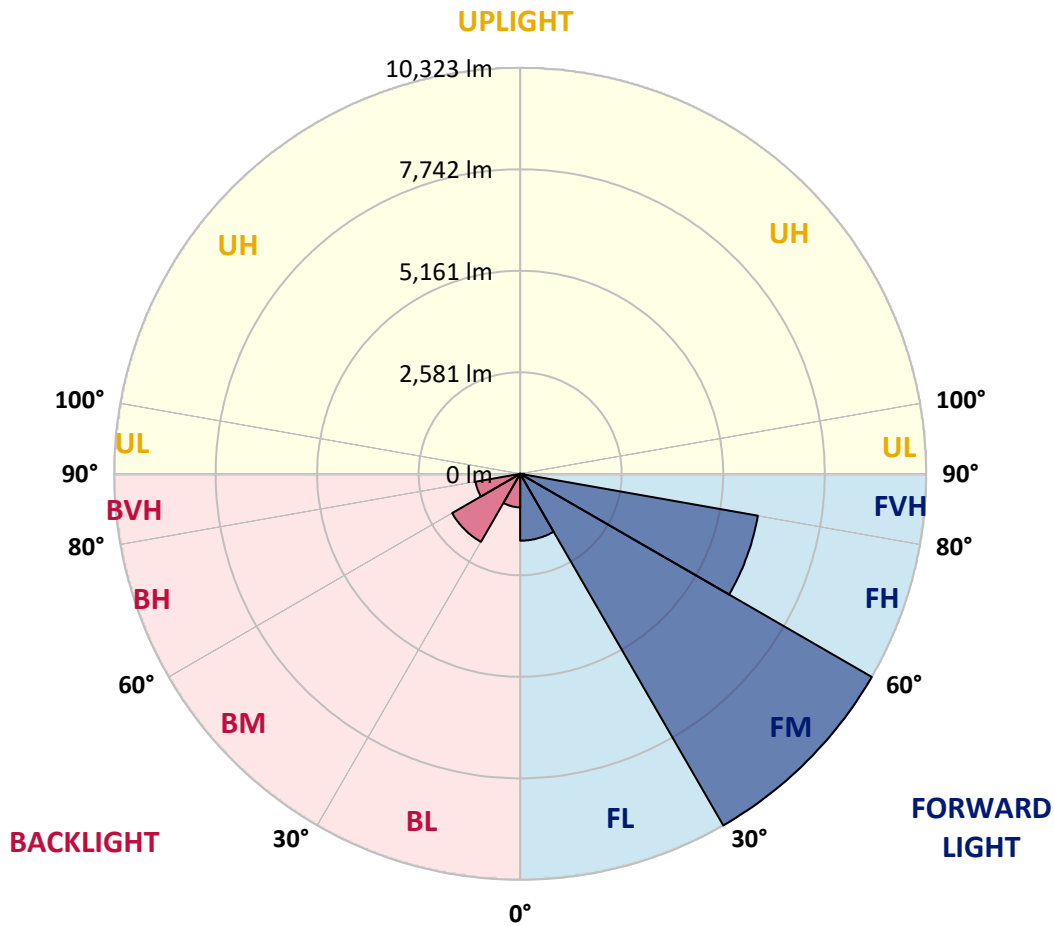
CATALOG NUMBER: NAV-SB3D-735-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1700.3	7.6			
FM (30°-60°)	10322.9	46.3			
FH (60°-80°)	6136.2	27.5			G3/7500
FVH (80°-90°)	91.3	0.4			G1/100
BL (0°-30°)	852.7	3.8	B2/1000		
BM (30°-60°)	1998.0	9.0	B2/2500		
BH (60°-80°)	1152.3	5.2	B3/2500		G3/2500
BVH (80°-90°)	34.3	0.2			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: P883426

CATALOG NUMBER: NAV-SB3D-735-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3692.4	3692.4	3692.4	3692.4	3692.4	3692.4	3692.4	3692.4	3692.4	3692.4	3692.4
2.5°	3902.6	3925.0	3912.2	3905.8	3894.6	3878.5	3865.7	3825.6	3783.8	3756.6	3746.9
5°	3981.2	4003.7	4002.1	4008.5	4016.5	4021.3	4018.1	3973.2	3913.8	3867.3	3840.0
7.5°	3913.8	3939.5	3960.3	3992.4	4048.6	4108.0	4136.9	4127.2	4066.3	4002.1	3968.4
10°	3722.9	3750.1	3799.9	3875.3	3994.0	4122.4	4229.9	4279.7	4241.2	4170.6	4124.0
12.5°	3373.0	3400.3	3498.2	3661.9	3860.9	4083.9	4289.3	4422.5	4432.1	4361.5	4307.0
15°	2979.9	3007.2	3111.5	3316.9	3620.2	3978.0	4321.4	4573.3	4658.4	4597.4	4531.6
17.5°	2736.0	2760.0	2838.7	3004.0	3320.1	3766.2	4310.2	4733.8	4928.0	4879.8	4801.2
20°	2662.2	2683.0	2719.9	2835.5	3098.6	3546.3	4236.4	4884.6	5218.4	5191.1	5102.9
22.5°	2740.8	2760.0	2771.3	2822.6	2987.9	3401.9	4143.3	5038.7	5555.4	5558.6	5451.1
25°	2922.1	2941.4	2928.5	2960.6	3032.8	3357.0	4108.0	5220.0	5979.0	6014.3	5892.4
27.5°	3220.6	3222.2	3191.7	3190.1	3201.3	3424.4	4144.9	5414.2	6513.4	6579.2	6428.3
30°	3819.1	3795.1	3677.9	3551.2	3493.4	3626.6	4247.6	5643.7	7144.0	7261.2	7071.8
32.5°	4741.8	4706.5	4491.5	4188.2	3883.3	3952.3	4432.1	5905.2	7830.8	8042.7	7811.6
35°	5743.1	5733.5	5508.9	5057.9	4525.2	4416.1	4732.2	6248.6	8580.2	8917.2	8642.8
37.5°	6673.9	6669.0	6540.7	6009.5	5361.2	5062.8	5213.6	6697.9	9382.6	9870.4	9546.2
40°	7524.3	7538.8	7410.4	6935.4	6282.3	5892.4	5868.3	7253.2	10274.8	10908.6	10523.5
42.5°	8259.3	8275.3	8145.4	7793.9	7192.2	6810.3	6672.3	7933.5	11146.1	12023.9	11568.1
45°	8758.3	8857.8	8838.6	8557.8	8126.1	7729.7	7638.3	8787.2	12139.4	13206.5	12672.2
47.5°	8899.6	8991.0	9135.4	9174.0	8910.8	8520.8	8630.0	9815.8	13143.9	14390.8	13782.6
50°	8551.3	8636.4	8936.5	9336.0	9519.0	9398.6	9594.4	10918.2	14172.5	15571.8	14872.2
52.5°	7864.5	7951.2	8329.9	8962.1	9708.3	10087.0	10562.0	12004.6	15169.0	16690.3	15904.0
55°	6871.2	6962.7	7448.9	8164.6	9347.3	10371.0	11369.2	13089.4	16082.1	17696.4	16834.7
57.5°	5520.1	5587.5	6093.0	7094.3	8439.0	10088.6	11964.5	14273.6	16942.2	18684.9	17757.4
60°	3597.7	3657.1	4244.4	5361.2	6933.8	9145.1	12083.2	15594.3	18084.7	19970.2	19001.0
62.5°	2392.6	2432.7	2780.9	3600.9	4883.0	7333.4	11388.4	16648.5	19760.0	22207.2	21133.6
65°	1641.6	1681.7	2029.9	2601.2	3154.8	4850.9	9390.6	16508.9	21278.0	23983.5	22714.2
67.5°	1171.4	1205.1	1500.4	2039.5	2283.5	2817.8	6365.8	14724.5	21059.8	24050.9	22799.3
70°	839.2	858.5	1102.4	1588.6	1814.9	1692.9	3539.9	11261.6	18439.4	22208.8	21063.0
72.5°	587.3	593.7	765.4	1209.9	1461.9	1235.6	1684.9	7508.3	13946.3	17431.6	16329.2
75°	398.0	406.0	515.1	887.4	1173.0	943.6	892.2	4026.1	8187.1	9648.9	8649.2
77.5°	243.9	247.1	332.2	606.6	877.8	718.9	574.5	1705.8	3167.6	3109.9	2650.9
80°	138.0	138.0	211.8	377.1	598.5	463.8	402.8	725.3	1002.9	881.0	776.7
82.5°	77.0	78.6	154.0	234.3	396.4	274.4	221.4	335.4	433.3	383.5	333.8
85°	32.1	35.3	94.7	110.7	189.4	136.4	89.9	141.2	160.5	142.8	104.3
87.5°	3.2	4.8	28.9	20.9	22.5	27.3	12.8	27.3	22.5	22.5	16.0
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: P883426

CATALOG NUMBER: NAV-SB3D-735-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3692.4	3692.4	3692.4	3692.4	3692.4	3692.4	3692.4	3692.4	3692.4	3692.4	3692.4
2.5°	3716.4	3692.4	3631.4	3560.8	3467.7	3422.8	3361.8	3320.1	3284.8	3288.0	3255.9
5°	3788.6	3727.7	3591.3	3421.2	3209.4	3058.5	2898.1	2787.3	2697.5	2678.2	2634.9
7.5°	3888.1	3791.9	3552.8	3246.3	2888.4	2617.2	2374.9	2219.3	2108.5	2073.2	2037.9
10°	4016.5	3876.9	3503.0	3026.4	2511.3	2166.3	1906.4	1784.4	1709.0	1683.3	1664.1
12.5°	4165.7	3974.8	3437.2	2758.4	2123.0	1790.8	1625.5	1564.6	1540.5	1532.5	1527.7
15°	4353.5	4096.7	3337.7	2440.7	1794.0	1561.4	1490.7	1482.7	1485.9	1482.7	1481.1
17.5°	4576.5	4229.9	3175.7	2113.4	1572.6	1444.2	1418.5	1425.0	1433.0	1431.4	1428.2
20°	4820.5	4361.5	2968.7	1822.9	1421.7	1360.8	1346.3	1352.7	1359.2	1356.0	1354.3
22.5°	5098.1	4502.7	2739.2	1596.7	1320.7	1283.7	1267.7	1269.3	1269.3	1262.9	1259.7
25°	5430.2	4658.4	2498.5	1436.2	1243.6	1214.7	1195.5	1189.1	1179.4	1160.2	1157.0
27.5°	5826.6	4823.7	2267.4	1323.9	1182.6	1155.4	1132.9	1116.9	1092.8	1060.7	1057.5
30°	6272.7	5024.3	2071.6	1253.3	1134.5	1107.2	1081.6	1057.5	1022.2	982.1	978.9
32.5°	6797.4	5239.3	1928.8	1206.7	1091.2	1062.3	1031.8	1002.9	964.4	924.3	925.9
35°	7423.2	5499.2	1845.4	1174.6	1057.5	1019.0	985.3	953.2	924.3	889.0	885.8
37.5°	8102.0	5775.2	1819.7	1158.6	1035.0	975.6	937.1	914.7	911.5	890.6	889.0
40°	8845.0	6102.6	1839.0	1149.0	1010.9	933.9	892.2	887.4	895.4	858.5	860.1
42.5°	9631.3	6490.9	1871.1	1137.7	977.2	892.2	852.1	852.1	845.7	794.3	794.3
45°	10481.8	6938.6	1903.1	1110.4	937.1	850.5	820.0	808.8	781.5	731.7	730.1
47.5°	11338.7	7394.4	1927.2	1060.7	889.0	815.2	787.9	762.2	722.1	677.2	675.6
50°	12152.2	7803.6	1901.5	986.9	834.4	781.5	752.6	717.3	674.0	643.5	638.7
52.5°	12879.2	8158.2	1792.4	900.2	776.7	746.2	720.5	683.6	648.3	616.2	613.0
55°	13511.4	8445.4	1599.9	818.4	725.3	715.7	690.0	643.5	595.3	568.1	564.8
57.5°	14118.0	8663.7	1359.2	751.0	678.8	682.0	643.5	601.8	556.8	527.9	524.7
60°	14925.1	8955.7	1115.3	688.4	629.0	638.7	596.9	566.5	510.3	473.4	468.6
62.5°	16215.3	9409.8	885.8	611.4	571.3	574.5	556.8	519.9	452.5	409.2	406.0
65°	17239.1	9243.0	698.0	527.9	505.5	510.3	510.3	470.2	398.0	348.2	343.4
67.5°	17123.5	7914.3	556.8	446.1	442.9	446.1	457.3	423.6	353.0	312.9	306.5
70°	15774.0	6295.2	446.1	370.7	385.1	377.1	409.2	386.7	317.7	277.6	272.8
72.5°	12871.1	4534.8	340.2	306.5	295.3	308.1	369.1	348.2	264.8	219.8	215.0
75°	7521.1	2419.9	253.5	242.3	213.4	256.7	327.4	296.9	202.2	162.1	157.3
77.5°	2448.7	844.1	186.1	178.1	158.9	207.0	279.2	250.3	165.3	128.4	123.6
80°	656.3	255.1	126.8	117.1	102.7	154.0	221.4	199.0	118.7	83.4	81.8
82.5°	263.2	107.5	73.8	65.8	56.2	105.9	174.9	160.5	88.3	53.0	53.0
85°	85.0	35.3	27.3	20.9	25.7	65.8	104.3	109.1	62.6	27.3	20.9
87.5°	11.2	4.8	4.8	6.4	4.8	11.2	32.1	30.5	17.7	3.2	0.0
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)