

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: P196626

Luminaire Tested: **NAV-AF-06-D-UNV-SL3-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P196626  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24262)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-AF-06-D-UNV-SL3-7030  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 70 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 34793.6 lumens  
Efficiency: N/A  
Efficacy: 104.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B3 - U0 - G5

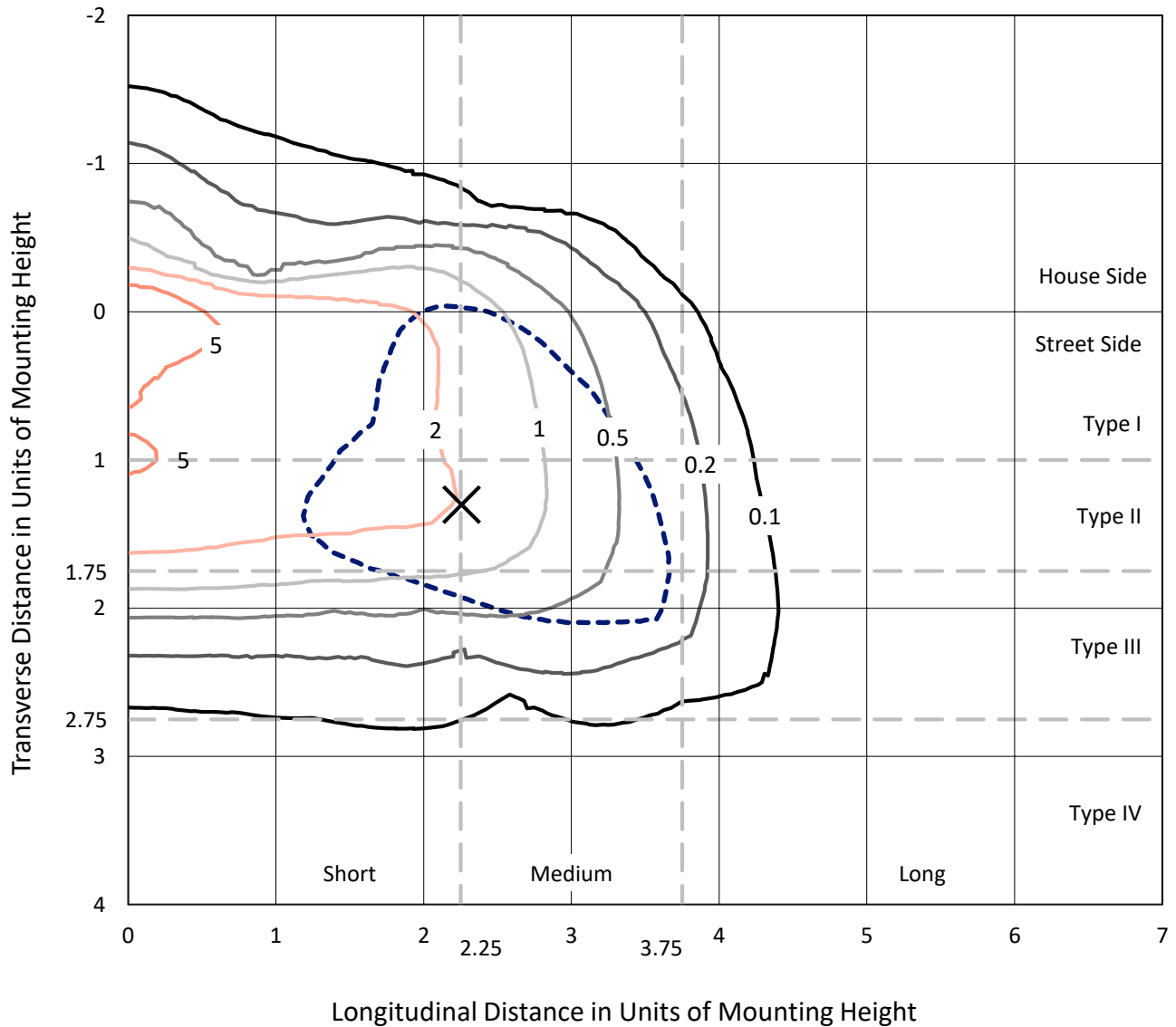
Input Watts (W): 333  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P196626  
 CATALOG NUMBER: NAV-AF-06-D-UNV-SL3-7030

### Iso-Footcandle Lines of Horizontal Illumination

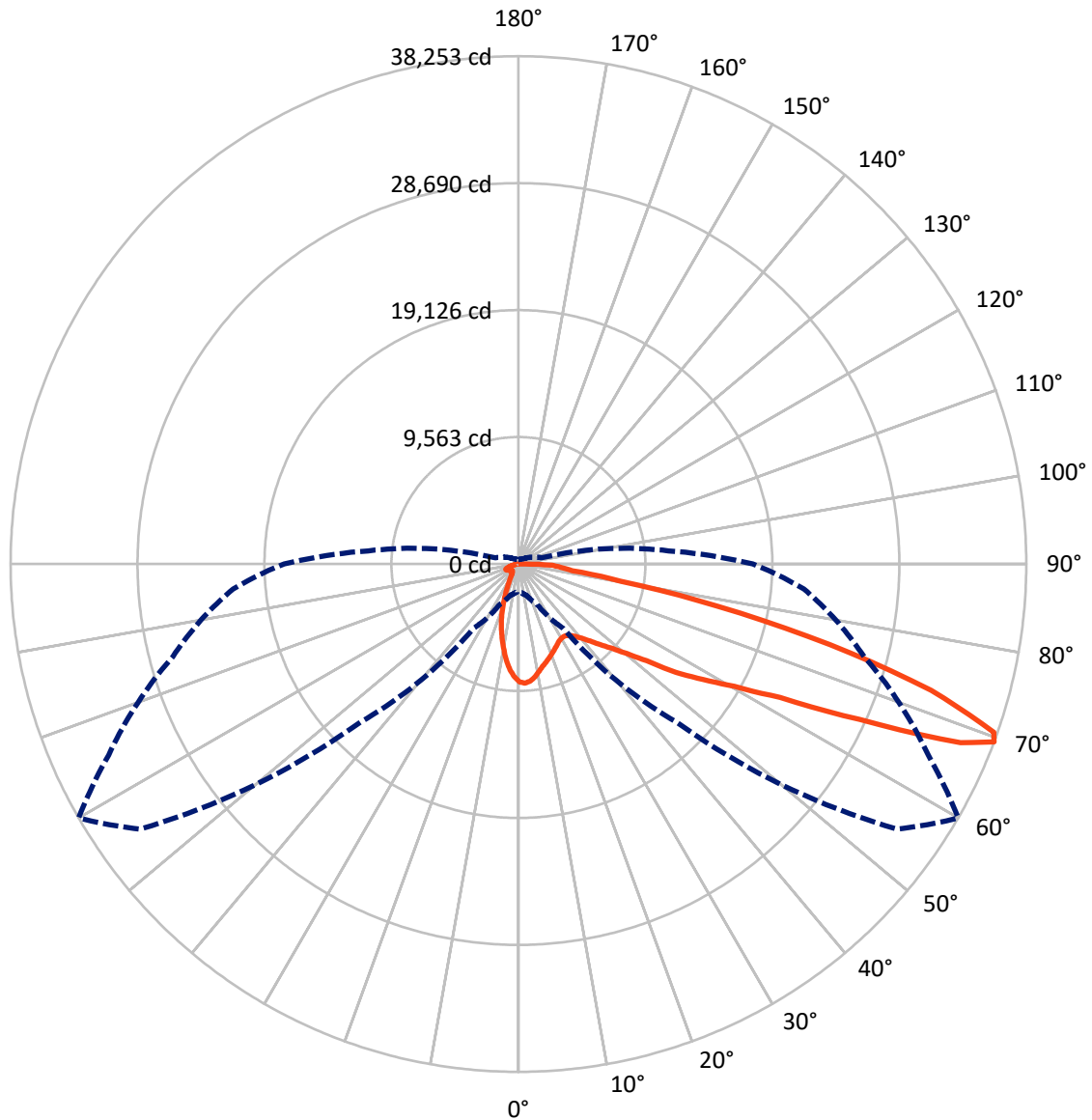
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.9 fc  
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P196626  
CATALOG NUMBER: NAV-AF-06-D-UNV-SL3-7030

### Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P196626

CATALOG NUMBER: NAV-AF-06-D-UNV-SL3-7030

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4962.7	0.0	4962.7
	% Fixture	14.3	0.0	14.3
<b>Street Side</b>	Lumens	29830.9	0.0	29830.9
	% Fixture	85.7	0.0	85.7
<b>Total</b>	Lumens	34793.6	0.0	34793.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	753.1	2.2
10°-20°	1612.5	4.6
20°-30°	2057.1	5.9
30°-40°	2830.8	8.1
40°-50°	4585.3	13.2
50°-60°	7196.4	20.7
60°-70°	9594.1	27.6
70°-80°	5336.5	15.3
80°-90°	827.7	2.4
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°	34793.6	100.0
0°-180°	34793.6	100.0

**Coefficient of Utilization**



REPORT NUMBER: P196626

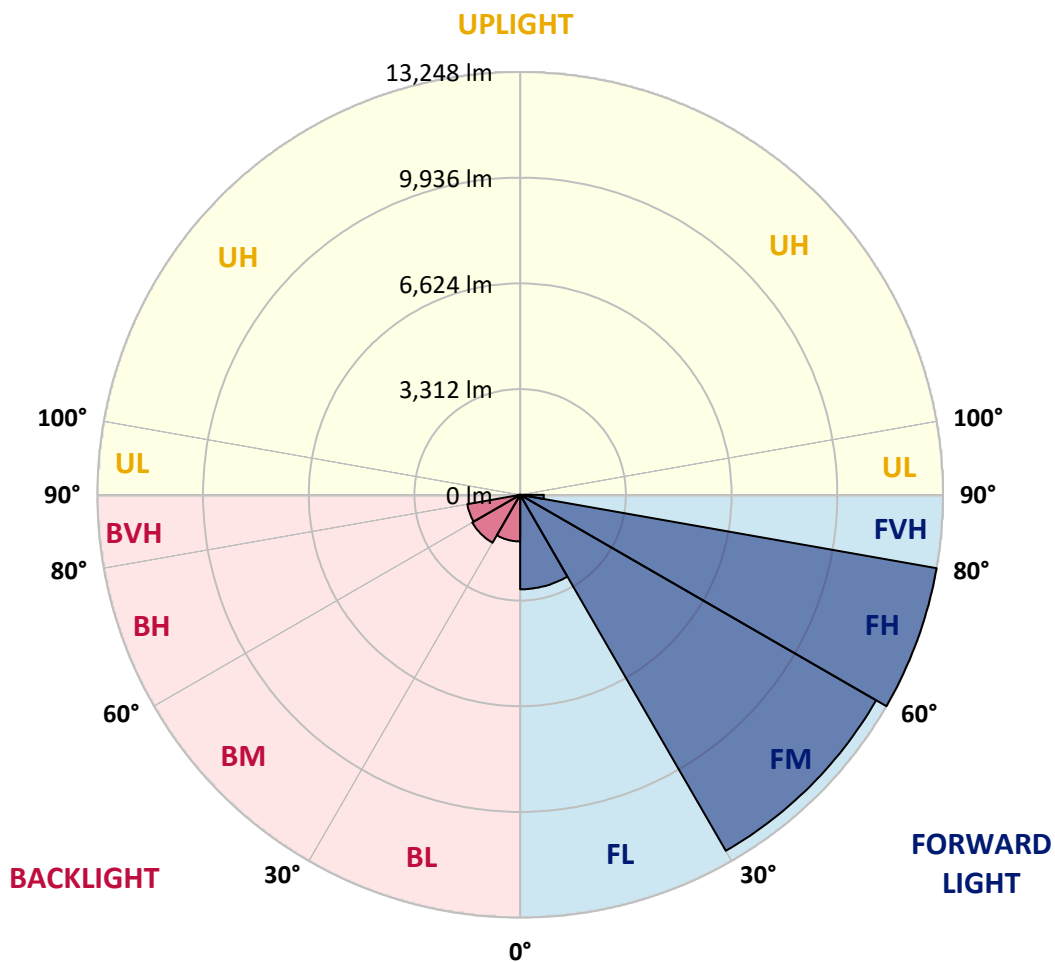
CATALOG NUMBER: NAV-AF-06-D-UNV-SL3-7030

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2960.3	8.5			
FM	(30°-60°)	12878.8	37.0			
FH	(60°-80°)	13248.1	38.1			G5
FVH	(80°-90°)	743.8	2.1			G4/750
BL	(0°-30°)	1462.5	4.2	B3/2500		
BM	(30°-60°)	1733.7	5.0	B2/2500		
BH	(60°-80°)	1682.6	4.8	B3/2500		G3/2500
BVH	(80°-90°)	83.9	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-G5**

Type III Medium





REPORT NUMBER: P196626

CATALOG NUMBER: NAV-AF-06-D-UNV-SL3-7030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	8877.8	8877.8	8877.8	8877.8	8877.8	8877.8	8877.8	8877.8	8877.8	8877.8	8877.8
2.5°	9114.2	9138.8	9138.8	9118.7	9107.6	9042.9	9004.9	8978.1	8931.3	8844.2	8766.1
5°	8788.5	8835.4	8855.4	8864.3	8922.3	8902.2	8904.5	8886.6	8846.5	8752.8	8625.6
7.5°	8190.5	8199.5	8235.1	8295.4	8435.9	8534.1	8614.4	8630.1	8621.1	8551.9	8373.4
10°	7601.5	7617.1	7659.5	7762.1	7895.9	8036.6	8210.7	8282.0	8335.5	8313.2	8087.9
12.5°	7112.9	7115.1	7162.0	7280.2	7429.7	7606.0	7842.4	7954.0	8081.2	8132.5	7880.5
15°	6642.1	6673.3	6718.0	6860.7	7045.9	7269.0	7541.3	7695.2	7862.6	8009.8	7719.7
17.5°	6285.1	6309.6	6336.4	6454.7	6668.8	6947.8	7284.7	7449.8	7670.6	7895.9	7554.6
20°	6088.8	6097.6	6077.6	6135.7	6316.4	6617.5	7008.0	7206.6	7469.8	7786.7	7385.1
22.5°	6048.6	6048.6	5975.0	5963.8	6044.1	6298.5	6722.4	6965.6	7286.9	7710.9	7233.4
25°	6236.1	6222.7	6084.3	5957.2	5928.2	6057.6	6450.2	6749.2	7130.7	7708.6	7119.6
27.5°	6590.7	6572.9	6401.2	6187.0	6001.7	5946.0	6240.5	6546.2	7008.0	7784.4	7061.5
30°	7032.6	7025.8	6851.8	6584.1	6278.5	5990.5	6158.0	6441.3	6925.5	7925.0	7059.4
32.5°	7516.7	7485.5	7378.4	7110.6	6713.6	6238.2	6207.0	6445.7	6903.1	8130.3	7110.6
35°	8032.0	8009.8	7983.0	7713.0	7266.9	6675.5	6423.5	6599.7	7012.5	8415.8	7255.7
37.5°	8688.1	8663.5	8708.2	8413.6	7925.0	7249.0	6789.4	6907.6	7235.5	8830.9	7525.7
40°	9854.9	9783.5	9658.6	9205.6	8692.5	7951.8	7318.1	7336.0	7617.1	9386.4	7958.5
42.5°	11771.5	11541.7	10923.6	10091.4	9502.4	8768.4	8007.5	7922.8	8143.6	10120.4	8587.7
45°	13692.5	13433.7	12389.6	11057.5	10341.3	9645.2	8859.9	8656.8	8799.6	10975.0	9397.6
47.5°	14933.0	14805.8	13627.8	12023.7	11220.4	10600.2	9834.9	9500.2	9602.8	11943.2	10397.1
50°	15296.8	15187.4	14261.4	12779.9	12050.4	11753.7	11041.8	10597.9	10615.7	13074.5	11595.2
52.5°	15024.5	14979.9	14366.3	13248.4	12813.4	12969.6	12713.1	12095.0	11947.7	14315.0	12893.8
55°	14660.9	14676.5	14439.9	13719.2	13589.8	14103.0	14899.5	14402.0	13777.3	15606.8	14245.8
57.5°	13516.3	13527.4	14147.7	14616.1	15071.3	15691.6	16602.0	16392.1	15664.8	17001.3	15760.7
60°	10883.6	10970.5	12351.5	14431.0	16764.7	18821.9	19045.0	18683.6	17672.8	18607.7	17730.8
62.5°	7775.6	7853.5	9453.3	12527.8	16566.2	22365.0	23556.4	22119.5	20397.1	21010.7	20502.0
65°	4085.2	4071.9	5310.1	8656.8	13953.5	23186.0	30664.8	28219.5	24986.5	24315.0	23179.4
67.5°	2282.4	2356.0	2835.9	4366.3	9094.0	20406.1	35205.1	35925.7	31367.6	26936.6	23063.3
69°	2110.7	2135.3	2456.4	3375.7	5928.2	16836.2	34814.7	38252.9	34058.3	26947.7	21577.4
70°	2050.5	2077.2	2369.5	3110.2	4979.9	13795.2	33393.5	37980.7	34712.1	26349.7	20225.3
72.5°	1838.5	1874.2	2157.6	2795.6	4196.7	7110.6	26898.6	32507.7	31443.4	23029.7	15682.6
75°	1568.5	1628.7	2057.2	2775.5	3975.8	4520.3	17938.4	24219.1	23402.5	16470.3	8897.7
77.5°	649.2	656.0	899.1	2032.5	4172.3	4326.2	9640.7	15341.3	13580.9	7222.1	2679.6
80°	452.9	444.0	448.5	593.5	3366.9	4355.2	4946.3	7802.3	6064.2	1905.4	1253.9
82.5°	381.6	377.1	394.9	372.6	1140.1	4942.1	4136.5	4067.4	2855.8	1026.3	597.9
85°	252.2	245.4	323.5	339.1	542.2	3924.6	4448.9	3197.3	2128.5	548.8	254.3
87.5°	122.7	125.0	185.2	229.8	287.8	1242.8	4261.4	2527.9	1644.4	238.7	102.6
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: P196626

CATALOG NUMBER: NAV-AF-06-D-UNV-SL3-7030

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8877.8	8877.8	8877.8	8877.8	8877.8	8877.8	8877.8	8877.8	8877.8	8877.8	8877.8
2.5°	8734.9	8668.0	8607.8	8531.8	8473.8	8424.8	8357.9	8355.6	8344.4	8360.1	8364.6
5°	8540.8	8429.3	8259.7	8070.0	7936.1	7759.9	7588.0	7530.0	7465.3	7458.7	7478.8
7.5°	8248.5	8074.5	7784.4	7494.4	7204.3	6907.6	6626.5	6483.7	6345.3	6302.9	6323.1
10°	7922.8	7701.9	7257.9	6784.9	6376.6	5934.9	5506.4	5229.8	4977.7	4870.6	4897.3
12.5°	7668.5	7387.3	6762.6	6149.0	5537.7	4904.0	4339.6	3792.9	3380.2	3195.0	3206.1
15°	7449.8	7090.6	6298.5	5481.9	4716.6	3848.7	3065.6	2431.9	2070.5	1936.6	1932.1
17.5°	7213.3	6778.2	5814.3	4861.6	3868.8	2795.6	2052.7	1677.7	1535.0	1490.4	1490.4
20°	6961.1	6456.9	5308.0	4185.6	2976.3	1952.3	1544.0	1398.9	1345.4	1332.0	1329.8
22.5°	6726.9	6142.3	4799.2	3464.9	2153.1	1481.4	1314.2	1258.3	1249.5	1260.7	1260.7
25°	6541.7	5865.7	4283.8	2706.4	1566.2	1240.5	1169.1	1162.4	1195.9	1236.0	1242.8
27.5°	6403.3	5618.0	3775.1	1976.8	1231.6	1079.9	1055.3	1084.3	1162.4	1242.8	1258.3
30°	6307.4	5406.0	3166.0	1421.3	1026.3	945.9	957.1	1008.5	1126.7	1249.5	1282.9
32.5°	6265.0	5234.3	2552.4	1091.1	876.8	832.2	861.2	928.1	1050.8	1173.6	1213.8
35°	6305.3	5109.3	1985.7	905.9	767.5	734.0	767.5	836.7	917.0	977.3	1001.8
37.5°	6450.2	5064.7	1494.8	803.2	696.1	662.6	689.4	736.3	772.0	794.4	805.5
40°	6755.9	5111.5	1171.4	749.6	656.0	618.1	624.8	647.1	671.6	689.4	691.6
42.5°	7242.2	5265.5	1041.9	729.7	631.4	582.4	571.2	586.8	613.6	638.1	642.6
45°	7889.3	5522.1	1028.5	736.3	620.3	553.3	531.0	546.7	582.4	622.4	629.3
47.5°	8726.0	5928.2	1091.1	772.0	626.9	537.7	504.2	519.8	566.7	620.3	629.3
50°	9716.7	6490.3	1207.1	825.6	658.2	537.7	493.1	506.4	555.6	615.7	624.8
52.5°	10883.6	7273.5	1327.5	879.1	702.7	557.8	497.5	495.3	540.0	595.7	606.8
55°	12170.8	8246.3	1443.6	926.0	727.3	584.5	508.7	482.0	517.7	562.2	571.2
57.5°	13685.9	9578.3	1646.5	970.6	740.8	604.6	522.0	468.5	488.6	519.8	526.5
60°	15740.7	11534.9	2041.5	1046.3	765.3	613.6	524.3	455.2	452.9	475.3	477.5
62.5°	18420.2	13826.3	2418.6	1135.6	814.4	615.7	515.3	446.3	423.9	430.6	430.6
65°	20325.7	14669.7	2309.2	1211.4	859.0	613.6	506.4	439.6	401.6	390.5	390.5
67.5°	19241.3	12958.4	1961.2	1231.6	863.4	589.0	486.4	423.9	381.6	354.8	354.8
69°	17648.3	11358.7	1800.5	1195.9	827.7	560.1	464.1	408.3	368.1	336.9	336.9
70°	16349.8	10147.2	1702.4	1153.4	785.3	535.5	444.0	392.7	354.8	328.0	325.7
72.5°	12206.6	6771.5	1454.7	995.2	644.8	452.9	388.2	350.2	319.0	301.2	301.2
75°	6441.3	3393.6	1191.5	812.2	497.5	361.4	319.0	294.6	276.7	274.5	272.2
77.5°	2110.7	1535.0	856.8	611.3	365.9	281.2	254.3	238.7	236.5	245.4	245.4
80°	1140.1	917.0	551.1	412.8	254.3	209.8	196.3	194.2	200.8	214.1	214.1
82.5°	553.3	452.9	328.0	254.3	174.0	153.9	153.9	156.1	165.1	180.8	180.8
85°	238.7	214.1	189.7	142.8	107.1	95.9	109.4	120.5	127.2	138.3	142.8
87.5°	113.7	100.4	87.0	55.8	46.9	49.0	58.0	71.3	84.7	93.8	95.9
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)