

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: P195138

Luminaire Tested: **NAV-AF-06-D-UNV-SL2-7060**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P195138  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24257)  
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-SL2-7060  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 70 CRI, 5700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35315 lumens  
Efficiency: N/A  
Efficacy: 106.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium - Semi-Cutoff  
BUG Rating: B3 - U0 - G5

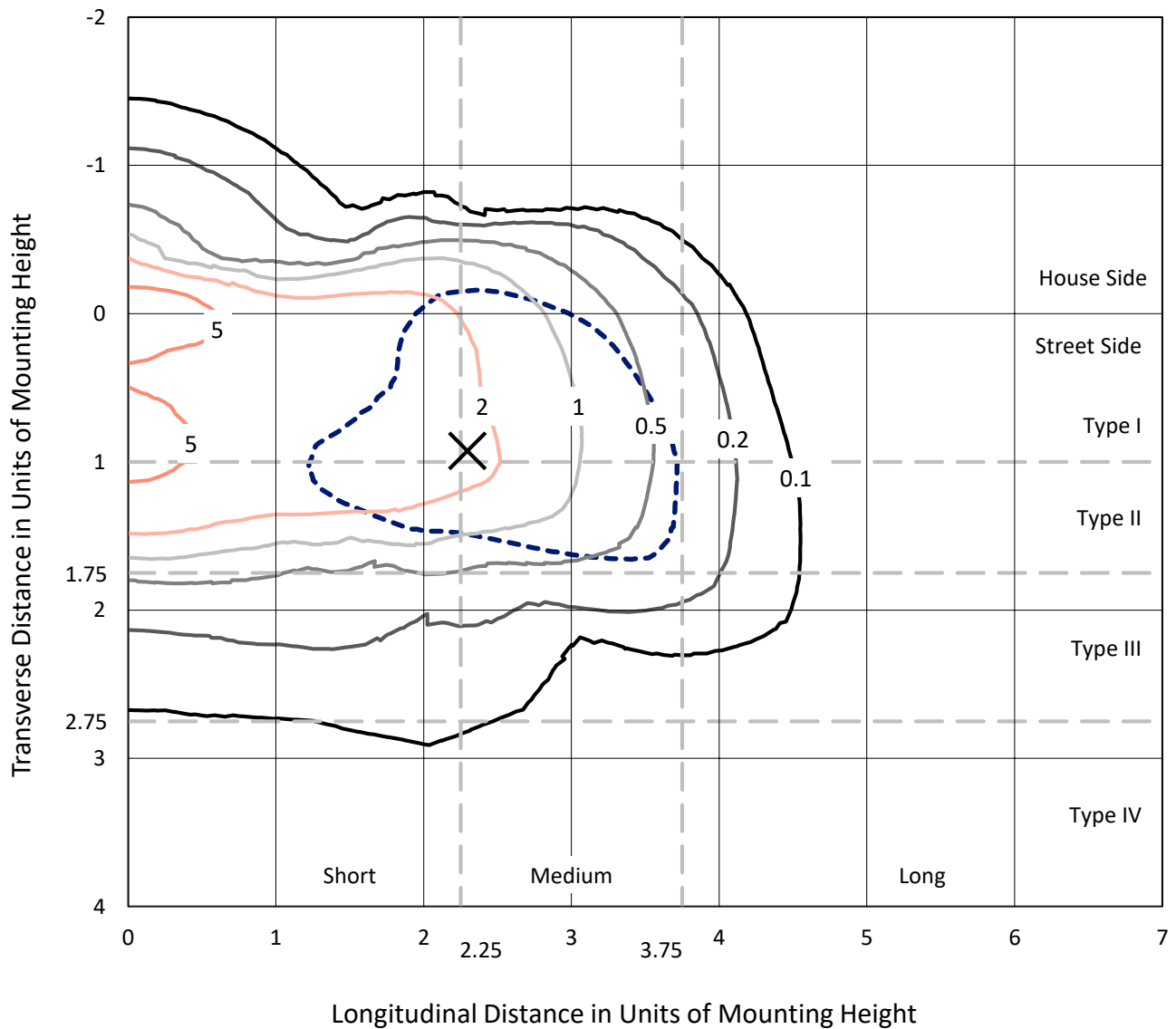
Input Watts (W): 333  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P195138  
 CATALOG NUMBER: NAV-AF-06-D-UNV-SL2-7060

### Iso-Footcandle Lines of Horizontal Illumination

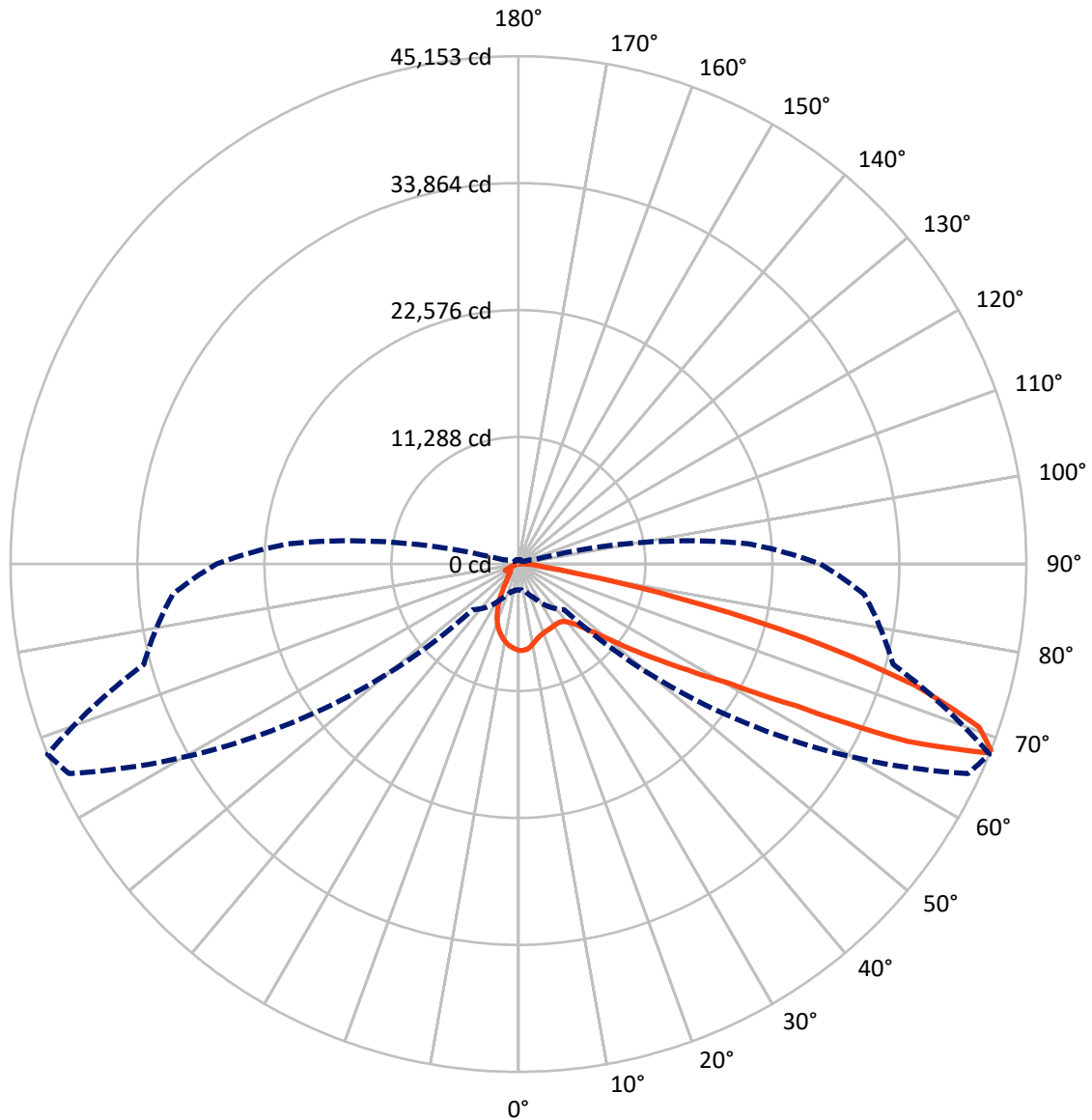
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.5 fc  
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P195138  
CATALOG NUMBER: NAV-AF-06-D-UNV-SL2-7060

### Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral    - - - Horizontal Cone Through 68-Deg Vertical

REPORT NUMBER: P195138

CATALOG NUMBER: NAV-AF-06-D-UNV-SL2-7060

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5777.6	0.0	5777.6
	% Fixture	16.4	0.0	16.4
<b>Street Side</b>	Lumens	29537.4	0.0	29537.4
	% Fixture	83.6	0.0	83.6
<b>Total</b>	Lumens	35315.0	0.0	35315.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	658.4	1.9
10°-20°	1527.1	4.3
20°-30°	2065.3	5.8
30°-40°	2912.0	8.2
40°-50°	4788.5	13.6
50°-60°	7422.5	21.0
60°-70°	9623.9	27.3
70°-80°	5522.7	15.6
80°-90°	794.6	2.3
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°	35315.0	100.0
0°-180°	35315.0	100.0



REPORT NUMBER: P195138

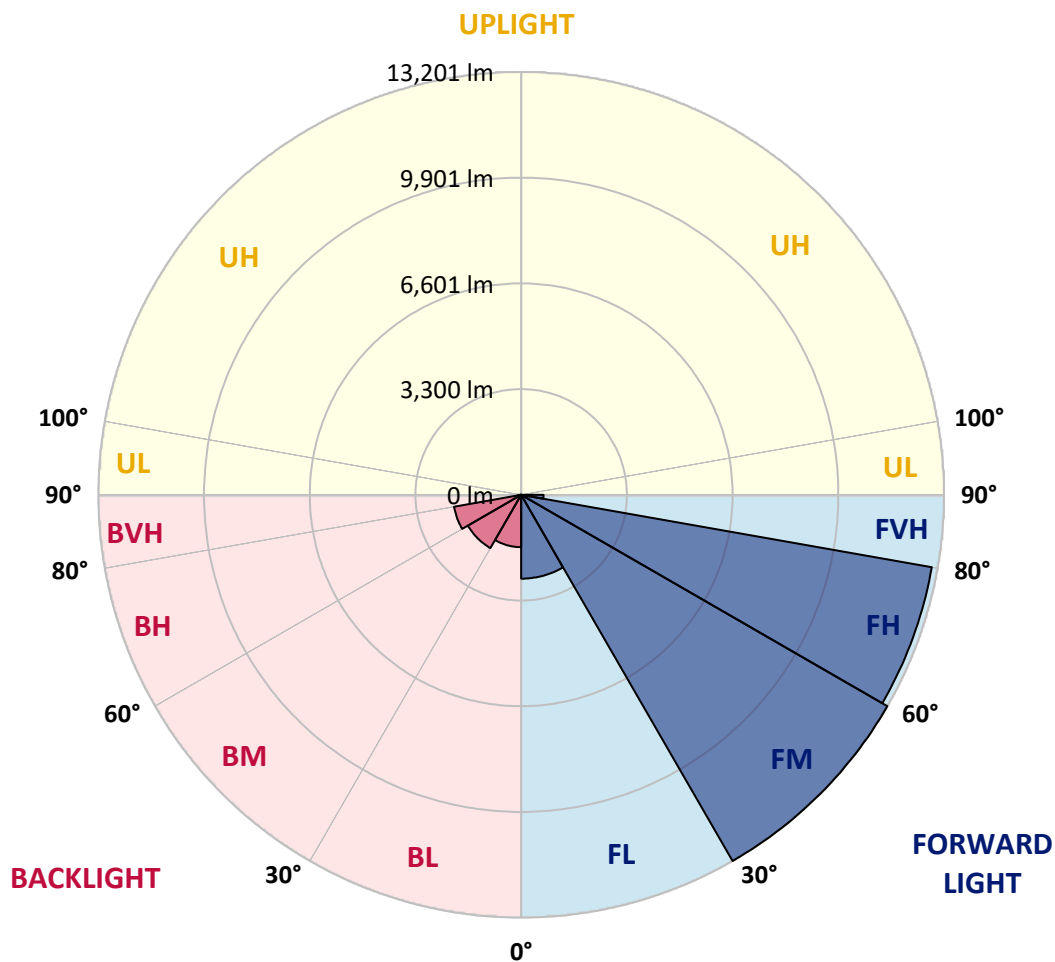
CATALOG NUMBER: NAV-AF-06-D-UNV-SL2-7060

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2617.4	7.4			
FM	(30°-60°)	13201.3	37.4			
FH	(60°-80°)	13018.7	36.9			G5
FVH	(80°-90°)	699.9	2.0			G4/750
BL	(0°-30°)	1633.4	4.6	B3/2500		
BM	(30°-60°)	1921.7	5.4	B2/2500		
BH	(60°-80°)	2127.8	6.0	B3/2500		G3/2500
BVH	(80°-90°)	94.7	0.3			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 II Medium





REPORT NUMBER: P195138  
 CATALOG NUMBER: NAV-AF-06-D-UNV-SL2-7060

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	7684.2	7684.2	7684.2	7684.2	7684.2	7684.2	7684.2	7684.2	7684.2	7684.2	7684.2
2.5°	7478.9	7538.9	7538.9	7582.7	7621.9	7654.2	7681.9	7681.9	7681.9	7663.5	7647.3
5°	6692.3	6773.0	6784.5	6895.3	7040.6	7218.2	7416.6	7592.0	7626.6	7691.1	7716.5
7.5°	6145.5	6170.9	6214.7	6290.9	6438.5	6657.7	6969.1	7361.3	7455.8	7658.9	7765.0
10°	5758.0	5778.7	5815.7	5891.8	6025.6	6224.0	6530.8	7040.6	7197.5	7557.4	7767.3
12.5°	5474.2	5490.4	5525.0	5594.2	5730.3	5907.9	6221.7	6752.2	6946.0	7455.8	7799.6
15°	5252.8	5280.5	5308.1	5375.0	5513.5	5684.2	6002.5	6542.3	6752.2	7375.1	7859.6
17.5°	5165.1	5179.0	5183.6	5218.2	5342.7	5515.8	5834.1	6394.7	6611.5	7310.5	7905.7
20°	5220.5	5222.8	5176.6	5153.6	5225.1	5384.3	5693.4	6284.0	6505.4	7252.8	7924.1
22.5°	5462.7	5462.7	5342.7	5241.2	5192.8	5292.0	5598.8	6207.8	6447.7	7209.0	7924.1
25°	5924.1	5903.3	5716.5	5515.8	5301.2	5259.7	5538.8	6159.4	6403.9	7185.9	7894.2
27.5°	6530.8	6512.3	6274.7	5977.1	5589.6	5328.9	5518.1	6120.2	6360.1	7151.3	7829.6
30°	7269.0	7252.8	6982.9	6593.1	6021.0	5548.1	5566.5	6092.5	6325.5	7093.7	7721.1
32.5°	8004.9	7995.7	7781.1	7382.0	6616.1	5919.5	5693.4	6087.9	6307.0	7024.5	7589.6
35°	8745.4	8745.4	8613.9	8277.1	7416.6	6477.7	5958.7	6173.2	6341.6	6987.6	7476.6
37.5°	9838.9	9795.0	9550.5	9202.2	8424.7	7202.1	6387.8	6353.2	6475.4	7049.8	7439.7
40°	11532.1	11405.2	10793.9	10208.0	9525.1	8129.5	7015.2	6701.5	6775.3	7262.1	7527.4
42.5°	13303.8	13103.1	12293.4	11356.8	10662.4	9273.7	7838.8	7266.7	7264.4	7672.7	7806.5
45°	14824.0	14720.2	13843.6	12655.6	11961.2	10560.9	8879.2	8106.4	8023.3	8309.4	8344.0
47.5°	15707.6	15638.4	15110.1	14030.5	13502.2	12081.1	10198.7	9271.4	9114.5	9285.2	9232.1
50°	15463.0	15529.9	15377.7	14826.3	15158.5	14217.3	11880.5	10867.7	10570.1	10740.8	10611.7
52.5°	14175.8	14355.7	14491.8	14598.0	16111.3	17075.6	13993.6	12860.9	12614.0	12584.0	12459.5
55°	11857.4	12143.4	12572.5	13352.2	15855.2	19370.9	17684.6	15271.6	14911.7	14722.5	14771.0
57.5°	8069.5	8503.2	9428.2	10911.6	14524.1	20349.0	23142.7	18385.9	17776.8	17103.2	17260.1
60°	4445.4	4807.5	5907.9	7402.8	11486.0	20203.7	27980.2	23447.2	21530.1	19744.6	20067.6
62.5°	2876.7	2955.1	3774.1	5056.7	7049.8	17836.8	30667.7	31906.5	27844.1	23228.0	23682.5
65°	2311.5	2366.9	2768.3	4078.6	4911.4	11474.4	30787.7	40681.9	38003.6	27961.7	27975.6
67.5°	2258.4	2283.8	2516.8	3430.3	4606.8	6247.0	26612.2	44142.2	44762.8	33549.0	30847.6
68°	2290.7	2320.7	2556.0	3324.2	4604.5	5758.0	24596.0	44089.2	45152.6	34483.3	30847.6
70°	2020.8	2057.7	2606.8	3439.6	4408.5	4950.6	16842.6	41747.7	43459.4	36631.0	29269.7
72.5°	1056.6	1026.6	1289.5	2715.2	4962.1	5158.2	8897.6	34877.8	36875.5	33925.0	25288.1
75°	823.6	749.7	722.1	1072.7	4364.6	5349.7	5167.4	24789.8	26298.5	24455.3	16902.5
77.5°	775.1	685.1	632.1	634.4	1921.6	5566.5	4180.1	14588.7	14588.7	11665.9	5393.5
80°	622.9	539.8	505.2	576.7	927.4	5130.5	4362.3	6648.4	5670.3	3015.1	1485.6
82.5°	410.6	366.8	369.1	468.3	703.6	3425.7	5052.1	3282.7	2466.1	1335.7	874.3
85°	260.7	223.8	249.1	327.6	526.0	1527.2	5001.3	2281.5	1633.3	749.7	436.0
87.5°	131.5	101.5	124.6	170.7	320.7	438.3	4117.8	2037.0	1211.1	311.4	237.6
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: P195138

CATALOG NUMBER: NAV-AF-06-D-UNV-SL2-7060

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7684.2	7684.2	7684.2	7684.2	7684.2	7684.2	7684.2	7684.2	7684.2	7684.2	7684.2
2.5°	7647.3	7596.6	7571.2	7529.7	7478.9	7428.2	7393.6	7377.4	7368.2	7372.8	7370.5
5°	7702.7	7635.8	7527.4	7372.8	7213.6	7045.2	6916.0	6816.8	6754.6	6736.1	6731.5
7.5°	7744.2	7647.3	7444.3	7162.9	6890.7	6595.4	6343.9	6143.2	6007.1	5944.8	5942.5
10°	7737.3	7612.7	7292.1	6876.8	6477.7	6044.0	5649.6	5312.8	5068.2	4950.6	4946.0
12.5°	7744.2	7573.5	7105.2	6542.3	5970.2	5349.7	4763.7	4240.1	3875.6	3702.5	3695.6
15°	7771.9	7532.0	6913.7	6168.6	5377.3	4500.7	3663.3	3005.9	2673.7	2560.6	2560.6
17.5°	7769.6	7462.8	6692.3	5734.9	4673.7	3499.5	2500.7	2094.7	2062.4	2166.2	2182.3
20°	7723.4	7352.0	6406.2	5220.5	3847.9	2422.2	1695.6	1637.9	1896.3	2182.3	2214.6
22.5°	7651.9	7209.0	6076.3	4623.0	2885.9	1577.9	1308.0	1395.7	1746.3	2101.6	2152.3
25°	7552.7	7036.0	5698.0	3928.6	1919.3	1135.0	1091.2	1199.6	1446.4	1684.0	1720.9
27.5°	7407.4	6816.8	5285.1	3176.6	1225.0	934.3	950.4	1026.6	1132.7	1234.2	1254.9
30°	7225.2	6560.8	4835.2	2343.8	929.7	835.1	862.8	908.9	955.0	1019.6	1033.5
32.5°	7040.6	6300.1	4366.9	1610.2	812.0	782.0	809.7	835.1	874.3	918.1	927.4
35°	6874.5	6057.9	3884.8	1123.5	761.3	747.4	761.3	777.4	816.6	860.5	865.1
37.5°	6754.6	5859.5	3381.9	888.2	731.3	717.4	724.4	731.3	777.4	842.0	848.9
40°	6738.4	5728.0	2872.1	798.2	708.2	689.8	685.1	689.8	749.7	823.6	830.5
42.5°	6895.3	5734.9	2373.8	761.3	689.8	669.0	650.5	659.8	712.8	770.5	775.1
45°	7266.7	5896.4	1942.4	745.1	673.6	657.5	629.8	634.4	659.8	689.8	694.4
47.5°	7921.8	6249.3	1612.5	735.9	659.8	645.9	611.3	597.5	599.8	615.9	615.9
50°	8969.2	6839.9	1411.8	726.7	648.2	622.9	583.6	556.0	549.0	558.3	560.6
52.5°	10530.9	7852.6	1314.9	708.2	627.5	592.9	549.0	521.4	509.8	519.0	519.0
55°	12641.7	9469.8	1268.8	682.8	602.1	556.0	516.7	493.7	484.4	491.4	491.4
57.5°	15047.8	11571.3	1347.2	648.2	569.8	516.7	489.1	472.9	466.0	472.9	475.2
60°	17906.0	14321.1	1887.0	604.4	535.2	482.1	466.0	456.8	452.1	459.1	459.1
62.5°	21705.5	17979.9	2920.5	569.8	498.3	449.8	445.2	440.6	436.0	442.9	442.9
65°	25807.1	21308.7	3005.9	549.0	466.0	422.2	424.5	424.5	419.9	426.8	426.8
67.5°	27112.8	21020.3	1679.4	523.7	426.8	394.5	403.7	403.7	401.4	408.3	406.0
68°	26836.0	20563.6	1462.6	516.7	419.9	387.6	396.8	399.1	396.8	403.7	401.4
70°	24773.6	18053.7	962.0	477.5	389.9	364.5	378.3	380.6	378.3	387.6	385.2
72.5°	20450.5	13541.4	710.5	417.5	353.0	334.5	348.3	350.6	353.0	362.2	359.9
75°	12987.8	7478.9	560.6	355.3	316.0	299.9	313.7	320.7	325.3	339.1	332.2
77.5°	3557.2	2270.0	454.5	302.2	272.2	265.3	274.5	283.7	288.4	304.5	293.0
80°	1245.7	1003.5	378.3	256.1	226.1	223.8	233.0	242.2	246.8	260.7	246.8
82.5°	756.7	655.2	302.2	200.7	177.6	175.3	186.9	196.1	200.7	200.7	191.5
85°	394.5	346.0	221.5	140.7	122.3	115.3	136.1	147.6	149.9	147.6	140.7
87.5°	221.5	196.1	117.7	66.9	55.4	57.7	71.5	87.7	94.6	92.3	87.7
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)