

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: P971342

Luminaire Tested: **NAV-SB6D-727-U-AFL-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P971342  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB6D-727-U-AFL-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 70 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 50021 lumens  
Efficiency: N/A  
Efficacy: 113.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G4

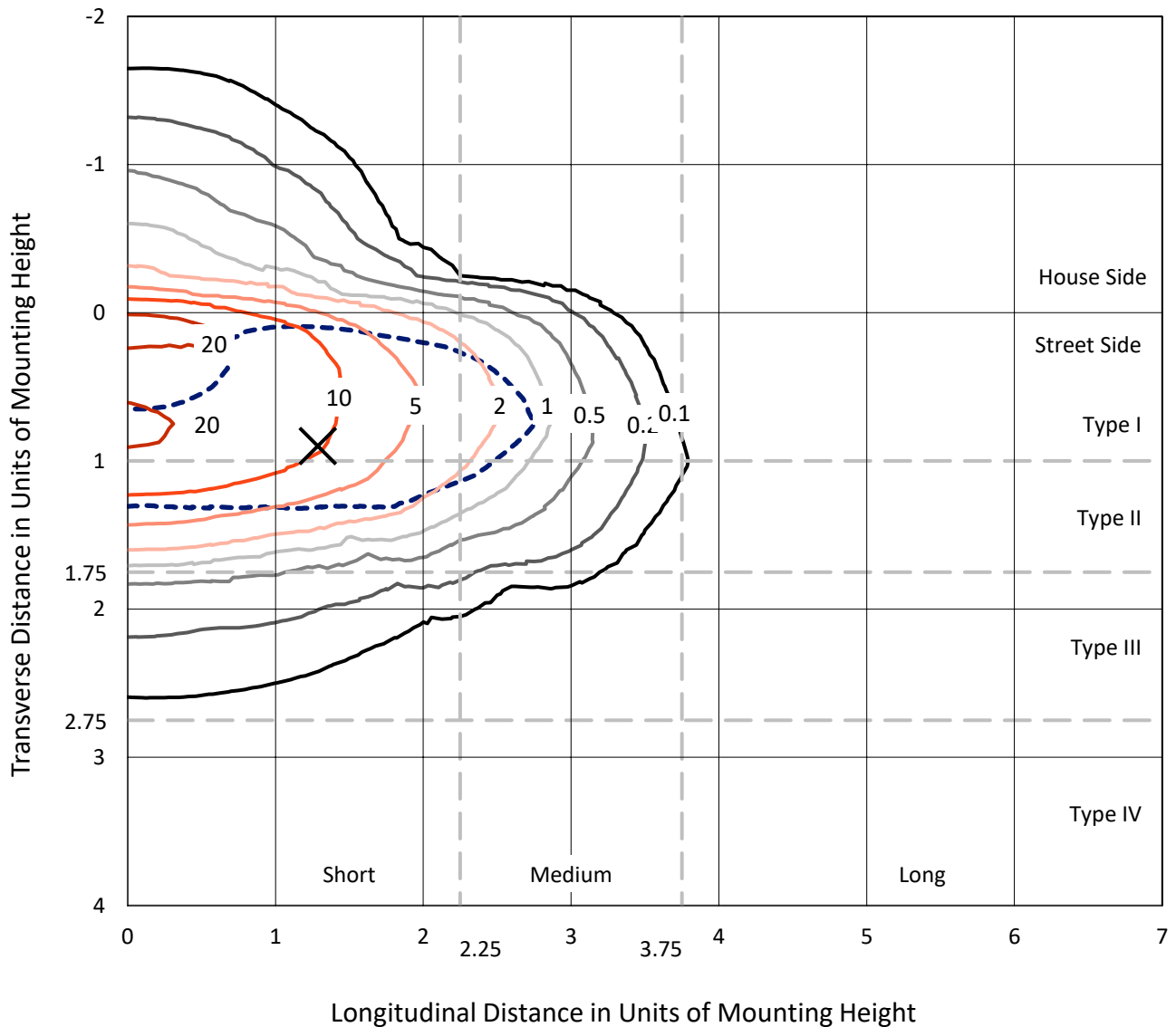
Input Watts (W): 440.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

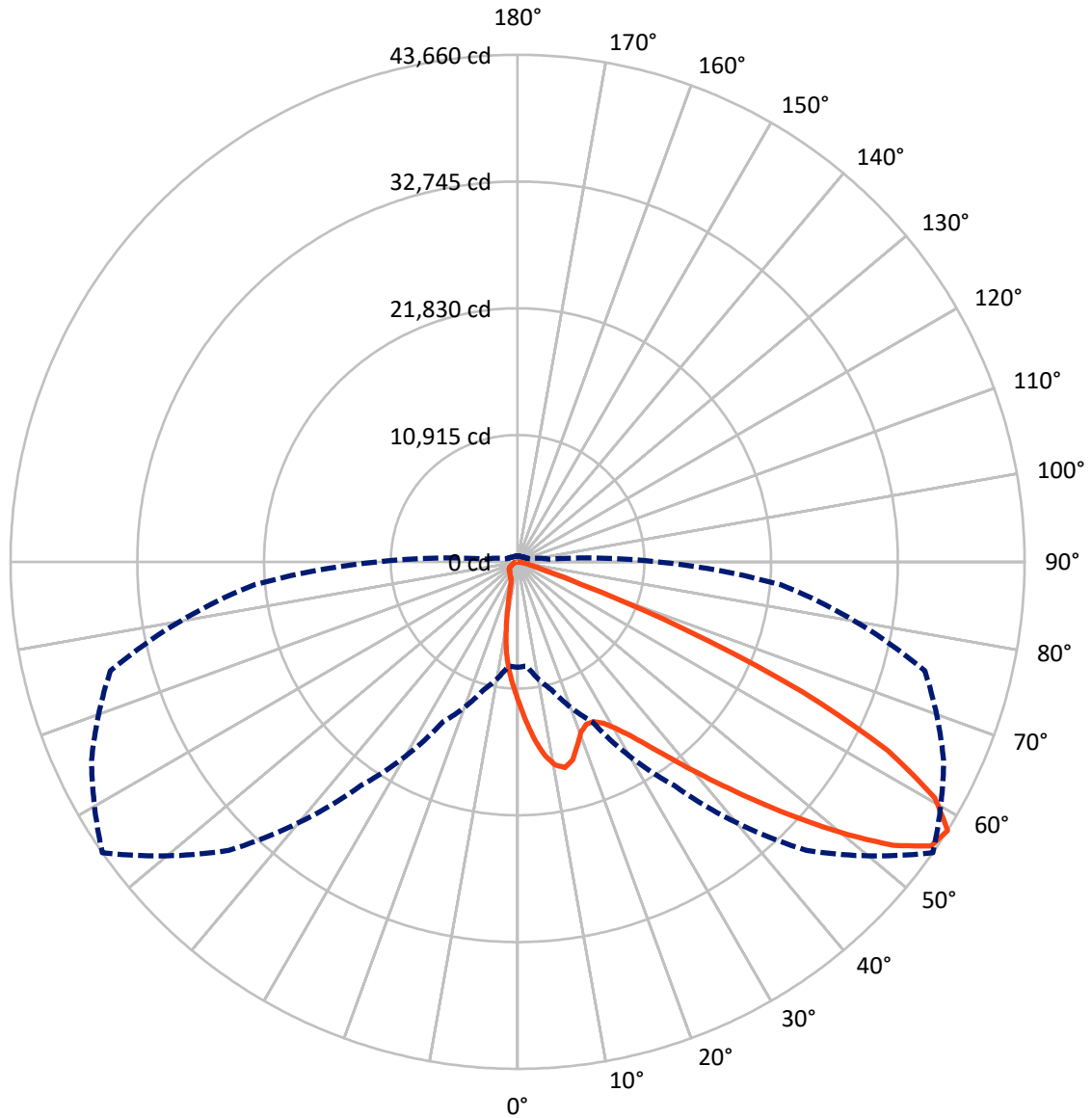
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 27.6 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral      - - - Horizontal Cone Through 57.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3906.4	0.0	3906.4
	% Fixture	7.8	0.0	7.8
<b>Street Side</b>	Lumens	46114.6	0.0	46114.6
	% Fixture	92.2	0.0	92.2
<b>Total</b>	Lumens	50021.0	0.0	50021.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1121.5	2.2
10°-20°	2709.1	5.4
20°-30°	4334.5	8.7
30°-40°	7336.4	14.7
40°-50°	12044.8	24.1
50°-60°	13238.1	26.5
60°-70°	7593.4	15.2
70°-80°	1551.6	3.1
80°-90°	91.5	0.2
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°	50021.0	100.0
0°-180°	50021.0	100.0

**Coefficient of Utilization**



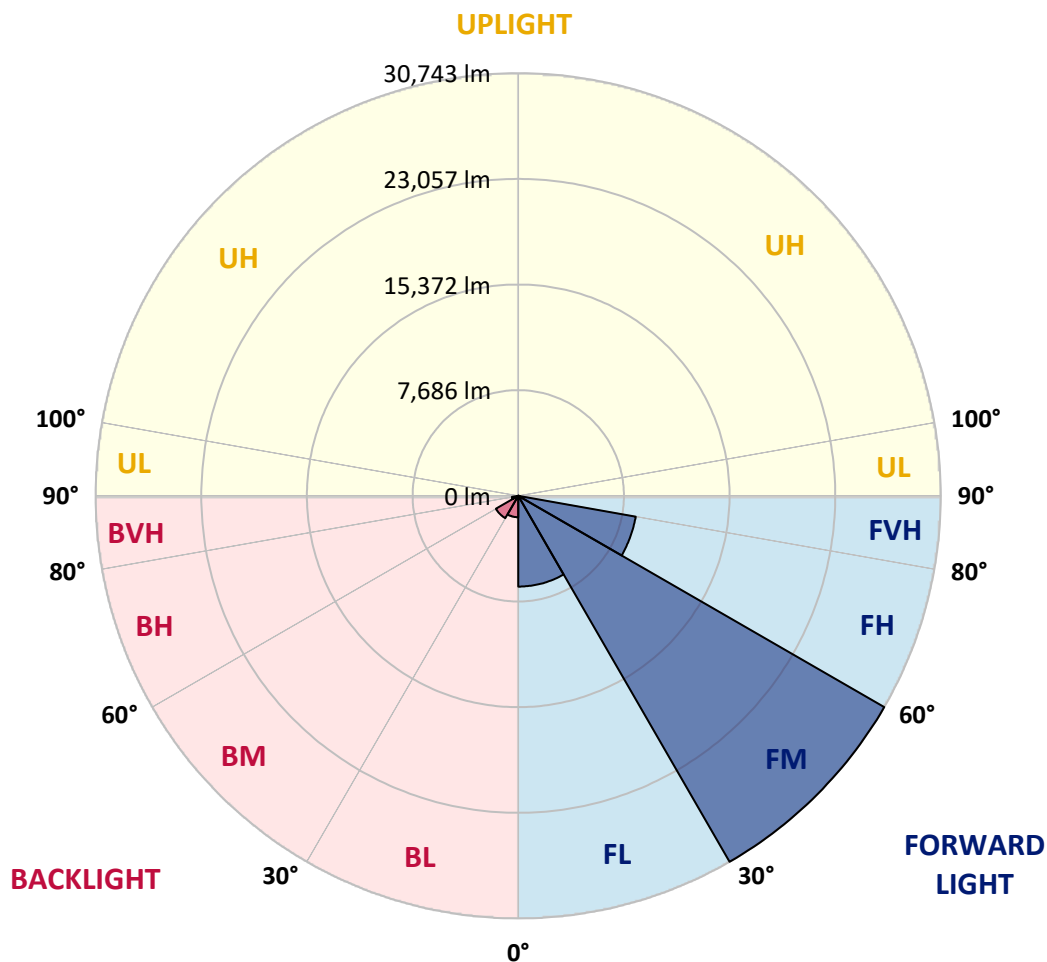
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6605.6	13.2			
FM (30°-60°)	30743.3	61.5			
FH (60°-80°)	8680.4	17.4			G4/12000
FVH (80°-90°)	85.4	0.2			G1/100
BL (0°-30°)	1559.6	3.1	B3/2500		
BM (30°-60°)	1876.1	3.8	B2/2500		
BH (60°-80°)	464.6	0.9	B1/500		G1/500
BVH (80°-90°)	6.2	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	12053.8	12053.8	12053.8	12053.8	12053.8	12053.8	12053.8	12053.8	12053.8	12053.8	12053.8
2.5°	14956.3	14768.1	14740.3	14703.3	14345.6	14077.2	13688.6	13262.9	12784.8	12297.5	12081.6
5°	17278.8	17130.7	17103.0	16930.2	16523.1	16066.7	15375.7	14502.8	13611.5	12562.8	12112.4
7.5°	17729.1	17701.3	17827.8	17821.7	17766.1	17405.2	16822.3	15782.8	14444.2	12889.7	12192.7
10°	15721.1	15792.2	16168.5	16498.5	17389.8	17908.0	17781.6	16924.1	15301.7	13262.9	12282.1
12.5°	13892.1	13808.9	14077.2	14450.4	15486.7	17028.9	18179.5	17877.2	16282.5	13685.5	12414.7
15°	12744.7	12710.8	12861.9	13034.7	13824.3	15378.8	17716.8	18651.4	17226.4	14185.2	12615.2
17.5°	12377.7	12349.9	12396.2	12439.4	12951.4	14154.3	16615.7	19126.4	18130.1	14755.8	12837.3
20°	12676.9	12639.9	12633.7	12599.8	12812.6	13633.0	15619.4	19160.3	18941.3	15273.9	13028.5
22.5°	13549.8	13506.6	13355.4	13219.7	13238.3	13703.9	15175.2	18821.0	19552.0	15758.2	13148.8
25°	15132.1	15061.1	14746.5	14290.0	14000.1	14197.5	15243.1	18373.7	20135.0	16137.6	13090.2
27.5°	17112.3	17019.7	16615.7	15937.1	15273.9	15033.4	15733.5	18065.3	20619.2	16427.5	12963.7
30°	19052.3	18932.1	18534.2	18006.7	17038.3	16279.5	16618.7	18201.0	21196.0	16729.7	12797.1
32.5°	21146.7	21032.5	20505.1	19851.2	19049.2	18028.3	17830.9	18864.2	21902.3	17152.4	12680.0
35°	23796.2	23617.2	22867.7	21976.3	21125.0	20091.7	19471.8	20008.5	22843.0	17797.0	12744.7
37.5°	26812.7	26572.1	25764.0	24533.3	23422.9	22266.3	21470.5	21581.6	24221.8	18660.6	12945.2
40°	29656.5	29437.5	28691.1	27531.4	26137.2	24733.8	23885.6	23638.9	26124.9	19712.4	13296.8
42.5°	31362.1	31164.8	30850.1	30359.8	29184.6	27753.4	26683.1	26149.5	28376.5	20970.9	13725.6
45°	31457.8	31285.0	31707.7	32278.3	32046.9	31093.8	29789.2	28811.4	30637.4	22152.2	14169.7
47.5°	29928.0	29810.7	31093.8	33086.4	34079.5	34480.5	33277.5	31251.1	32503.4	23000.4	14351.7
50°	25757.8	25714.7	28354.9	32013.0	34853.7	37447.7	36957.3	33521.3	33949.9	23438.4	14179.0
52.5°	22334.1	22176.8	23715.9	28577.0	33727.9	39008.4	40553.7	35748.2	34961.6	23521.6	13775.0
55°	16939.6	16800.8	18731.6	22827.7	30097.6	38453.2	43184.7	38046.1	35686.5	23308.8	13050.1
57.5°	9086.6	9000.3	11440.0	15193.8	23527.8	35122.0	43659.7	40476.5	36297.2	22744.3	12035.3
60°	3537.8	3522.4	4435.4	7371.7	14299.3	28573.9	41263.1	41935.5	36679.7	22050.4	11187.2
62.5°	2140.6	2186.8	2334.8	3309.5	6316.9	17750.7	35739.0	40276.0	36935.7	21415.0	10487.0
65°	1770.5	1773.6	1792.0	2273.2	3025.8	7427.3	26905.2	34816.7	36303.3	20283.0	9493.8
67.5°	1517.5	1545.3	1616.2	1804.4	2134.4	3257.1	15489.9	26970.0	32457.1	17649.0	7945.4
70°	1196.8	1233.8	1323.2	1483.6	1647.1	2038.8	5724.6	17945.1	24795.5	13303.1	6008.4
72.5°	1008.6	1005.5	1051.8	1206.0	1307.8	1434.3	2202.2	10055.1	14410.3	6350.8	2973.3
75°	780.3	811.2	869.8	1008.6	1070.3	1039.5	1193.6	3673.5	5163.3	1924.6	1011.7
77.5°	610.7	635.4	687.8	823.5	885.2	737.2	687.8	1313.9	1659.4	691.0	456.5
80°	274.5	296.1	468.8	607.6	721.7	508.9	373.2	672.4	737.2	314.6	231.3
82.5°	49.3	83.2	274.5	320.8	370.1	330.0	194.3	348.5	360.9	126.5	80.2
85°	3.1	6.1	95.6	117.2	148.0	107.9	58.6	138.8	120.3	43.2	30.9
87.5°	0.0	0.0	0.0	3.1	3.1	15.4	18.6	24.7	18.6	15.4	12.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	12053.8	12053.8	12053.8	12053.8	12053.8	12053.8	12053.8	12053.8	12053.8	12053.8
2.5°	11859.6	11421.6	10995.9	10647.4	10443.8	10098.3	9870.0	9833.0	9737.5	9820.7
5°	11631.3	10847.9	10055.1	9345.7	8762.8	8010.2	7448.8	7211.3	7004.6	7075.6
7.5°	11523.4	10286.5	9052.7	7840.5	6594.4	5391.5	4497.1	4123.9	3840.1	3880.1
10°	11378.3	9703.6	7769.6	5919.0	4250.3	3062.8	2446.0	2217.7	2091.2	2094.3
12.5°	11267.3	9006.5	6279.9	4012.8	2587.8	1955.5	1764.2	1708.8	1671.8	1674.8
15°	11211.8	8186.0	4808.6	2674.2	1850.6	1656.3	1610.1	1585.4	1560.7	1557.6
17.5°	11119.3	7273.0	3519.3	1952.4	1619.3	1551.4	1511.4	1483.6	1452.7	1446.6
20°	10980.4	6236.6	2572.3	1650.1	1517.5	1465.1	1409.6	1372.6	1335.6	1329.4
22.5°	10724.5	5141.7	1977.1	1526.7	1443.5	1384.9	1317.0	1273.9	1236.9	1230.7
25°	10249.5	4114.6	1665.6	1449.7	1378.7	1307.8	1233.8	1175.2	1141.2	1135.1
27.5°	9648.0	3232.4	1511.4	1378.7	1295.5	1230.7	1147.4	1091.8	1061.1	1054.8
30°	8938.6	2489.1	1421.9	1298.6	1196.8	1141.2	1067.2	1020.9	1002.4	1002.4
32.5°	8173.7	1989.4	1384.9	1218.3	1110.4	1048.7	990.0	971.6	965.4	962.4
35°	7455.0	1727.2	1366.4	1153.5	1033.3	974.7	950.0	953.0	965.4	965.4
37.5°	6816.6	1644.0	1357.1	1107.3	965.4	913.0	928.4	956.1	943.8	943.8
40°	6239.8	1653.2	1350.9	1073.4	909.9	879.0	909.9	888.3	857.4	854.3
42.5°	5798.6	1730.3	1338.6	1045.6	876.0	854.3	842.0	808.1	805.0	811.2
45°	5477.9	1798.2	1335.6	1033.3	839.0	798.9	783.4	749.5	811.2	826.7
47.5°	5098.6	1798.2	1335.6	990.0	777.3	761.9	737.2	700.2	761.9	777.3
50°	4608.1	1684.1	1283.1	940.7	728.0	718.6	675.5	629.2	616.8	626.2
52.5°	3988.2	1477.4	1150.5	872.9	678.6	660.1	607.6	573.7	564.5	564.5
55°	3281.8	1236.9	971.6	774.2	626.2	592.2	555.2	539.8	530.5	524.4
57.5°	2668.0	1014.7	780.3	687.8	576.8	533.6	521.2	502.8	487.3	478.1
60°	2189.9	798.9	644.6	610.7	527.5	487.3	484.2	459.6	419.4	413.3
62.5°	1690.2	586.0	542.8	530.5	478.1	444.1	438.0	388.7	327.0	314.6
65°	1193.6	456.5	438.0	465.8	425.7	394.8	379.4	305.3	240.6	231.3
67.5°	839.0	382.4	345.4	407.1	370.1	330.0	320.8	259.1	200.5	194.3
70°	598.4	311.5	283.7	348.5	296.1	290.0	271.4	215.9	163.5	157.3
72.5°	422.6	237.5	219.0	302.3	203.6	249.8	222.1	166.6	123.4	117.2
75°	311.5	169.6	154.3	175.8	148.0	188.2	157.3	111.0	77.1	74.0
77.5°	228.3	107.9	92.6	86.4	86.4	117.2	86.4	46.2	33.9	30.9
80°	160.4	49.3	43.2	37.0	33.9	27.8	12.3	6.1	3.1	3.1
82.5°	95.6	21.6	21.6	15.4	9.2	0.0	0.0	0.0	0.0	0.0
85°	21.6	9.2	9.2	3.1	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)