

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: P459878

Luminaire Tested: **NAV-SA6A-AMB-U-SL4-HSS**

Issue Date: 1/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459878  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2003-697-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SA6A-AMB-U-SL4-HSS  
Description: NAVION AREA AND ROADWAY LUMINAIRE  
(6) NARROW BAND AMBER, 500mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4723 lumens  
Efficiency: N/A  
Efficacy: 39.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

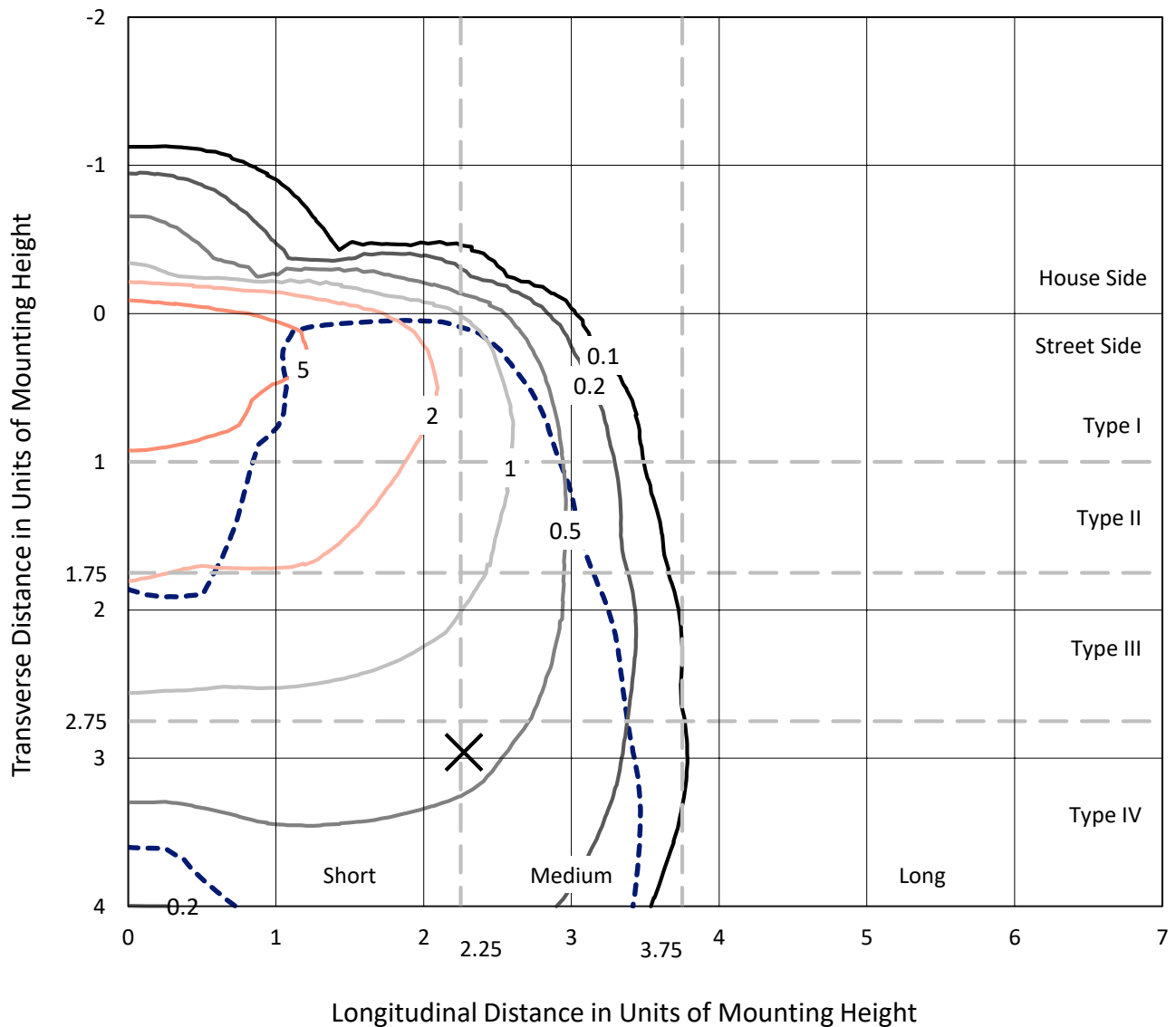
Input Watts (W): 119  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P459878  
 CATALOG NUMBER: NAV-SA6A-AMB-U-SL4-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

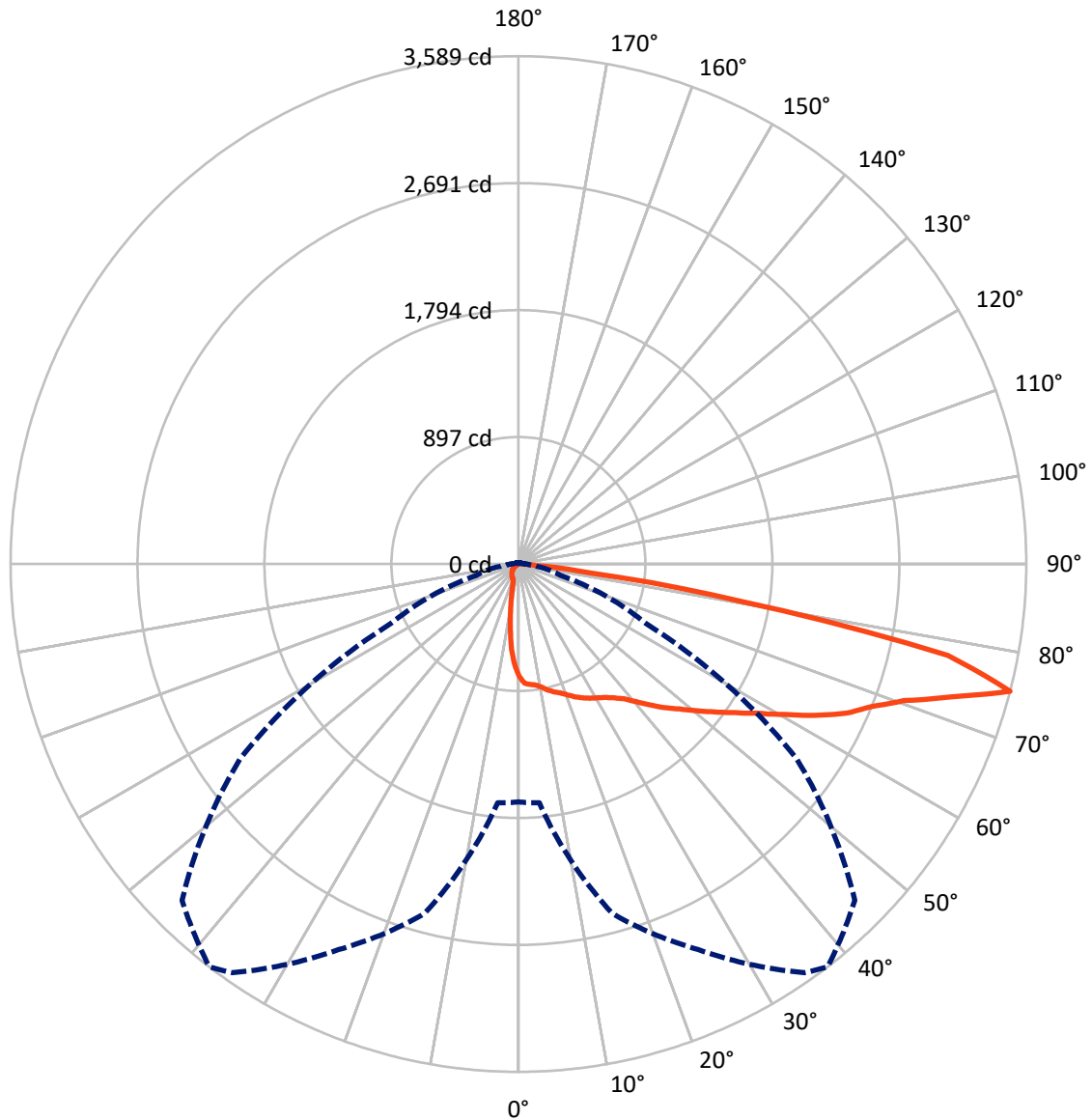


Based on 10 foot mounting height. Maximum calculated value = 8.5 fc  
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P459878

CATALOG NUMBER: NAV-SA6A-AMB-U-SL4-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 37.5-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P459878

CATALOG NUMBER: NAV-SA6A-AMB-U-SL4-HSS

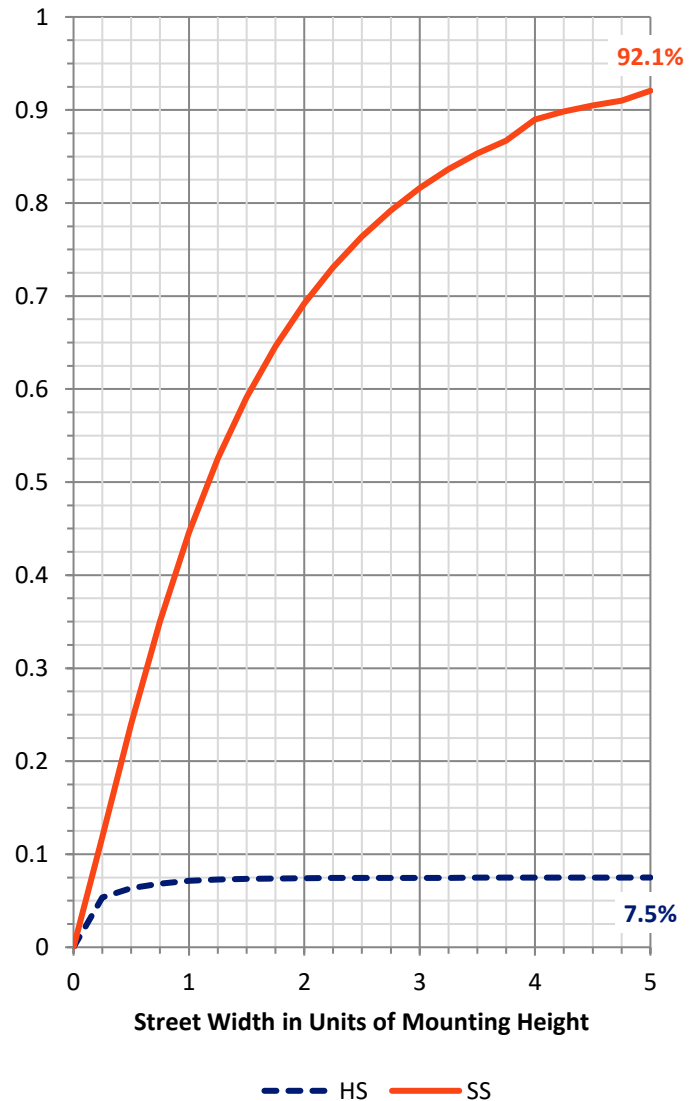
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	357.0	0.0	357.0
	% Fixture	7.6	0.0	7.6
<b>Street Side</b>	Lumens	4366.0	0.0	4366.0
	% Fixture	92.4	0.0	92.4
<b>Total</b>	Lumens	4723.0	0.0	4723.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.3	1.4
10°-20°	170.6	3.6
20°-30°	279.2	5.9
30°-40°	414.8	8.8
40°-50°	621.0	13.1
50°-60°	892.3	18.9
60°-70°	1195.8	25.3
70°-80°	968.7	20.5
80°-90°	113.3	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°	4723.0	100.0
0°-180°	4723.0	100.0



REPORT NUMBER: P459878

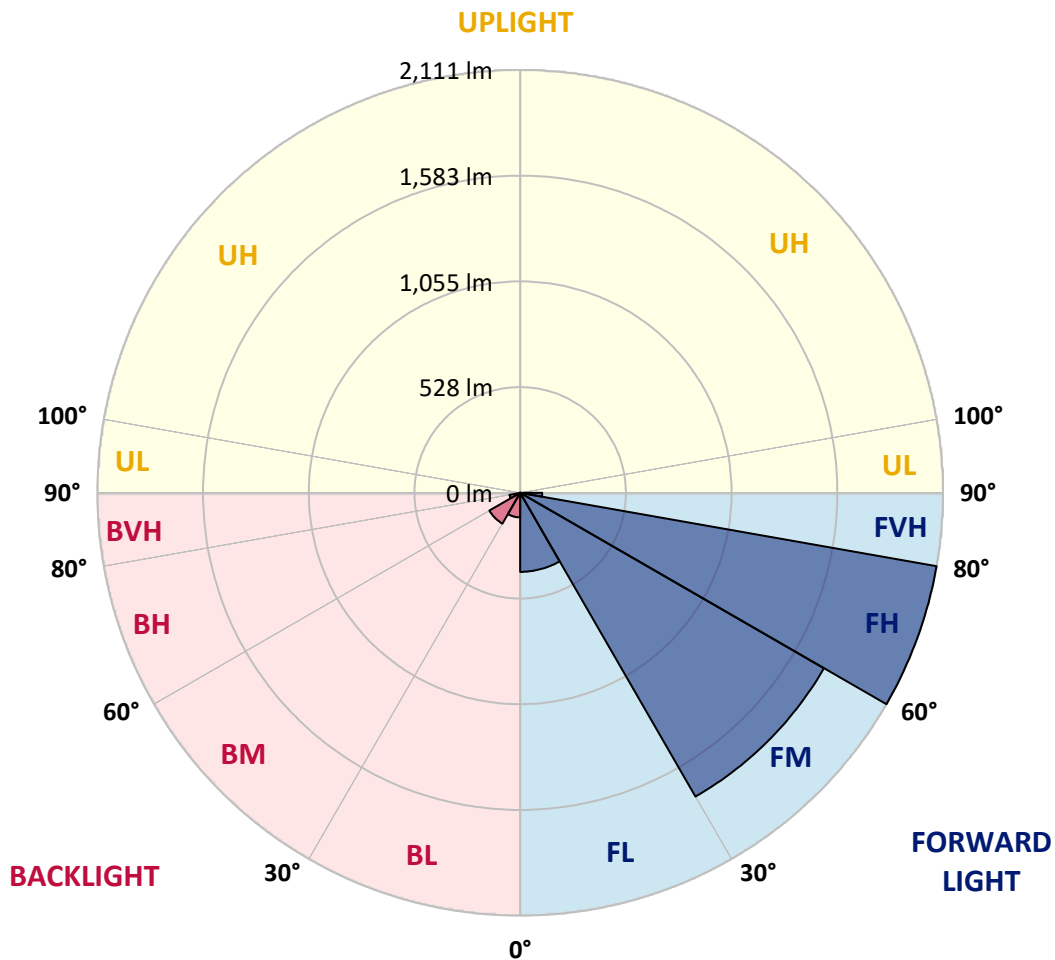
CATALOG NUMBER: NAV-SA6A-AMB-U-SL4-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	394.5	8.4			
FM (30°-60°)	1750.9	37.1			
FH (60°-80°)	2110.7	44.7			G2/5000
FVH (80°-90°)	110.0	2.3			G2/225
BL (0°-30°)	122.6	2.6	B1/500		
BM (30°-60°)	177.3	3.8	B0/220		
BH (60°-80°)	53.9	1.1	B0/110		G0/110
BVH (80°-90°)	3.2	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Medium





REPORT NUMBER: P459878

CATALOG NUMBER: NAV-SA6A-AMB-U-SL4-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37.5°	45°	55°	65°	75°	85°
0°	794.2	794.2	794.2	794.2	794.2	794.2	794.2	794.2	794.2	794.2	794.2
2.5°	854.9	852.3	852.3	847.0	844.4	844.4	833.8	831.2	820.6	810.1	796.9
5°	857.5	857.5	854.9	857.5	854.9	854.9	849.6	847.0	836.4	815.3	791.6
7.5°	873.4	870.7	868.1	868.1	862.8	862.8	849.6	844.4	833.8	820.6	786.3
10°	873.4	873.4	878.7	883.9	883.9	883.9	870.7	854.9	839.1	825.9	786.3
12.5°	870.7	870.7	878.7	897.1	910.3	913.0	905.0	883.9	857.5	833.8	796.9
15°	868.1	870.7	881.3	907.7	931.4	936.7	934.1	918.2	883.9	849.6	810.1
17.5°	873.4	878.7	891.8	928.8	955.2	957.8	960.5	949.9	913.0	870.7	831.2
20°	881.3	883.9	913.0	957.8	984.2	986.8	984.2	968.4	936.7	897.1	854.9
22.5°	894.5	899.8	936.7	986.8	1015.9	1018.5	1010.6	984.2	949.9	918.2	881.3
25°	920.9	926.1	971.0	1021.1	1042.2	1047.5	1039.6	1007.9	963.1	942.0	910.3
27.5°	952.5	960.5	1007.9	1055.4	1068.6	1073.9	1066.0	1029.1	981.6	973.6	947.3
30°	1000.0	1005.3	1050.2	1089.7	1095.0	1097.7	1092.4	1050.2	1007.9	1007.9	984.2
32.5°	1058.1	1066.0	1095.0	1124.0	1121.4	1124.0	1121.4	1076.6	1039.6	1060.7	1029.1
35°	1126.7	1118.8	1153.1	1166.3	1155.7	1161.0	1163.6	1118.8	1087.1	1129.3	1089.7
37.5°	1179.5	1179.5	1197.9	1211.1	1203.2	1208.5	1216.4	1174.2	1153.1	1227.0	1182.1
40°	1224.3	1224.3	1237.5	1263.9	1266.5	1277.1	1292.9	1242.8	1242.8	1340.4	1290.3
42.5°	1258.6	1263.9	1274.4	1308.7	1343.0	1361.5	1377.4	1327.2	1351.0	1485.5	1432.8
45°	1292.9	1298.2	1303.5	1353.6	1422.2	1448.6	1480.3	1432.8	1475.0	1638.6	1580.5
47.5°	1335.1	1335.1	1332.5	1411.7	1496.1	1530.4	1585.8	1546.2	1622.7	1825.9	1736.2
50°	1387.9	1382.6	1358.9	1472.3	1585.8	1628.0	1712.5	1672.9	1789.0	2021.2	1852.3
52.5°	1448.6	1435.4	1398.5	1535.7	1683.4	1736.2	1844.4	1818.0	1963.1	2176.8	1918.3
55°	1525.1	1504.0	1453.9	1612.2	1802.2	1854.9	1981.6	1997.4	2129.4	2266.6	1986.9
57.5°	1622.7	1583.2	1527.8	1707.2	1939.4	1989.5	2137.3	2171.6	2240.2	2353.6	2073.9
60°	1720.4	1678.2	1628.0	1836.5	2089.8	2158.4	2303.5	2316.7	2329.9	2475.0	2168.9
62.5°	1807.4	1783.7	1754.7	1981.6	2295.6	2356.3	2446.0	2427.5	2443.3	2617.5	2245.5
65°	1918.3	1894.5	1889.2	2147.8	2490.8	2543.6	2554.2	2562.1	2620.1	2757.3	2285.0
67.5°	2013.3	2005.3	2052.8	2345.7	2667.6	2688.7	2728.3	2773.2	2804.8	2820.7	2021.2
70°	2147.8	2134.6	2240.2	2543.6	2844.4	2889.3	3029.1	3074.0	2855.0	2311.4	1237.5
72.5°	2161.0	2184.8	2472.4	2749.4	3108.3	3205.9	3380.1	3139.9	2219.1	1240.1	385.2
75°	1680.8	1694.0	2554.2	3005.4	3525.2	3588.5	3361.6	2401.1	992.1	306.1	87.1
77.5°	936.7	986.8	1707.2	2789.0	3203.3	3103.0	2298.2	1060.7	255.9	68.6	44.9
80°	686.0	709.8	823.2	1596.4	1812.7	1593.7	957.8	403.7	139.8	47.5	31.7
82.5°	203.2	219.0	424.8	514.5	641.2	509.3	287.6	308.7	89.7	34.3	26.4
85°	55.4	58.0	145.1	203.2	184.7	118.7	105.5	266.5	36.9	23.7	21.1
87.5°	26.4	26.4	44.9	89.7	76.5	63.3	87.1	155.7	7.9	7.9	5.3
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: P459878

CATALOG NUMBER: NAV-SA6A-AMB-U-SL4-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	794.2	794.2	794.2	794.2	794.2	794.2	794.2	794.2	794.2	794.2	794.2
2.5°	788.9	783.7	762.6	752.0	741.4	723.0	712.4	704.5	701.9	696.6	699.2
5°	775.7	757.3	723.0	694.0	659.7	622.7	601.6	577.9	554.1	548.8	546.2
7.5°	765.2	738.8	686.0	630.6	572.6	509.3	451.2	414.3	377.3	372.0	369.4
10°	759.9	723.0	646.5	564.7	469.7	382.6	319.3	277.1	250.7	237.5	232.2
12.5°	759.9	715.1	614.8	498.7	377.3	282.3	219.0	176.8	158.3	150.4	147.8
15°	765.2	709.8	577.9	422.2	295.5	200.5	153.0	131.9	124.0	121.4	124.0
17.5°	778.4	709.8	543.6	356.2	224.3	147.8	121.4	118.7	116.1	116.1	116.1
20°	796.9	715.1	506.6	298.2	166.2	121.4	113.5	113.5	113.5	113.5	113.5
22.5°	818.0	717.7	464.4	242.8	134.6	110.8	108.2	108.2	108.2	108.2	108.2
25°	839.1	723.0	419.5	190.0	110.8	105.5	102.9	105.5	105.5	105.5	105.5
27.5°	865.5	728.3	374.7	150.4	102.9	100.3	100.3	100.3	100.3	100.3	100.3
30°	889.2	728.3	332.5	124.0	97.6	95.0	95.0	95.0	95.0	95.0	95.0
32.5°	918.2	725.6	287.6	102.9	92.4	89.7	87.1	89.7	89.7	89.7	87.1
35°	960.5	725.6	237.5	95.0	87.1	84.4	81.8	81.8	81.8	81.8	81.8
37.5°	1015.9	736.2	187.3	87.1	79.2	76.5	76.5	76.5	73.9	73.9	73.9
40°	1097.7	754.6	150.4	81.8	73.9	71.2	68.6	68.6	66.0	63.3	63.3
42.5°	1195.3	775.7	124.0	76.5	68.6	66.0	63.3	60.7	58.0	55.4	55.4
45°	1292.9	791.6	97.6	71.2	63.3	60.7	58.0	55.4	50.1	47.5	44.9
47.5°	1395.8	791.6	79.2	66.0	60.7	55.4	52.8	47.5	42.2	36.9	36.9
50°	1456.5	762.6	71.2	60.7	55.4	50.1	47.5	39.6	34.3	29.0	29.0
52.5°	1490.8	723.0	66.0	55.4	52.8	47.5	39.6	34.3	26.4	21.1	21.1
55°	1519.8	704.5	60.7	52.8	47.5	42.2	34.3	26.4	18.5	15.8	15.8
57.5°	1556.8	675.5	55.4	47.5	42.2	36.9	29.0	21.1	13.2	10.6	10.6
60°	1588.4	635.9	50.1	44.9	39.6	31.7	23.7	15.8	7.9	5.3	5.3
62.5°	1604.3	575.2	44.9	39.6	34.3	26.4	18.5	10.6	5.3	2.6	2.6
65°	1559.4	482.9	42.2	34.3	29.0	21.1	13.2	5.3	2.6	0.0	0.0
67.5°	1274.4	311.4	34.3	29.0	23.7	15.8	10.6	5.3	2.6	0.0	0.0
70°	654.4	131.9	29.0	23.7	21.1	13.2	7.9	2.6	0.0	0.0	0.0
72.5°	171.5	47.5	23.7	21.1	18.5	13.2	5.3	2.6	0.0	0.0	0.0
75°	52.8	31.7	18.5	15.8	15.8	10.6	5.3	2.6	0.0	0.0	0.0
77.5°	36.9	23.7	15.8	13.2	13.2	10.6	5.3	2.6	0.0	0.0	0.0
80°	29.0	21.1	13.2	10.6	13.2	13.2	5.3	2.6	0.0	0.0	0.0
82.5°	23.7	18.5	10.6	10.6	13.2	13.2	7.9	2.6	0.0	0.0	0.0
85°	18.5	13.2	10.6	10.6	13.2	10.6	5.3	2.6	0.0	0.0	0.0
87.5°	5.3	5.3	2.6	2.6	2.6	5.3	5.3	2.6	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	0.0

(END OF REPORT)