

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: P459876

Luminaire Tested: **NAV-SA6A-AMB-U-SL3-HSS**

Issue Date: 1/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459876  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2003-697-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SA6A-AMB-U-SL3-HSS  
Description: NAVION AREA AND ROADWAY LUMINAIRE  
(6) NARROW BAND AMBER, 500mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4897 lumens  
Efficiency: N/A  
Efficacy: 41.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

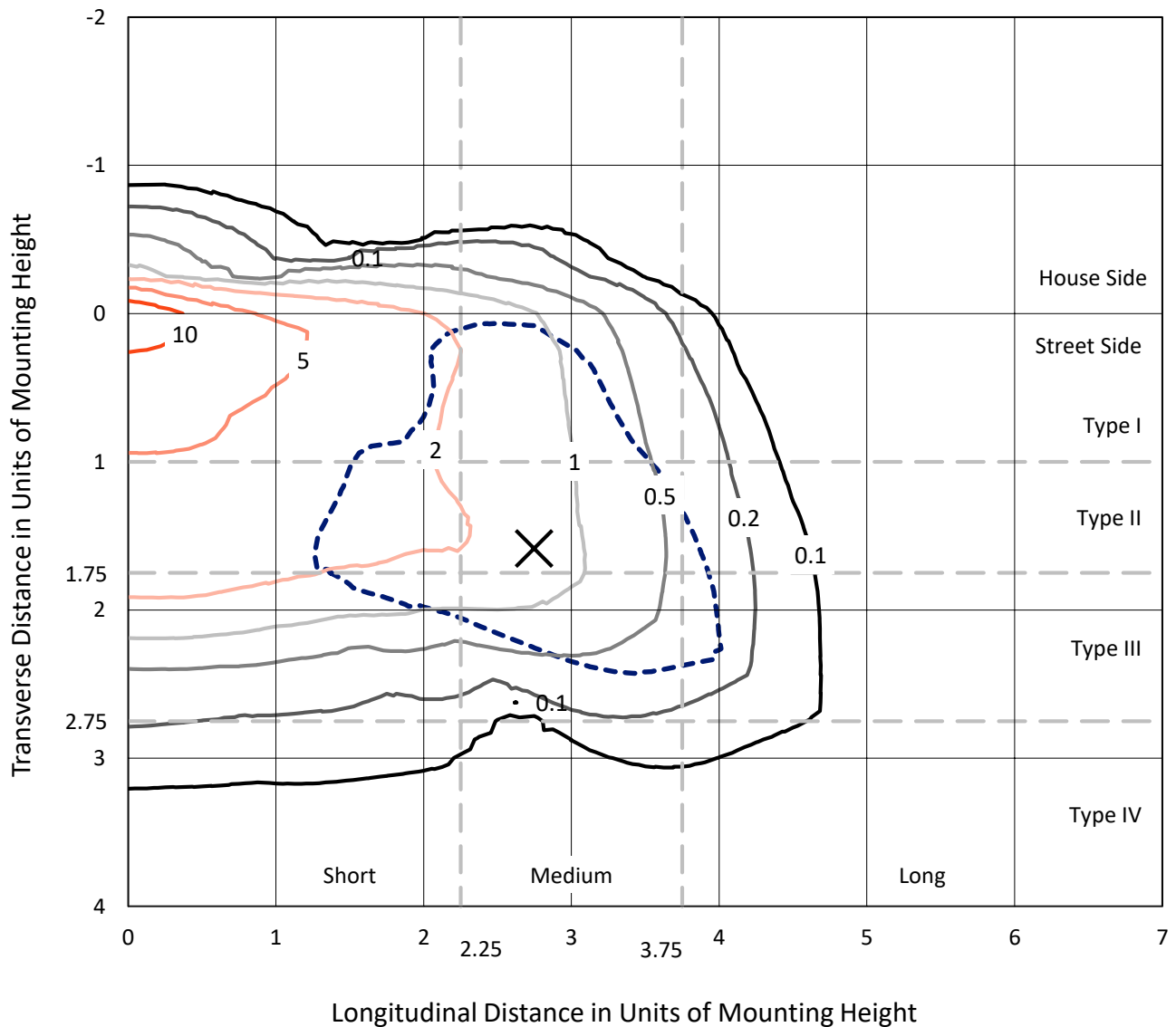
Input Watts (W): 119  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

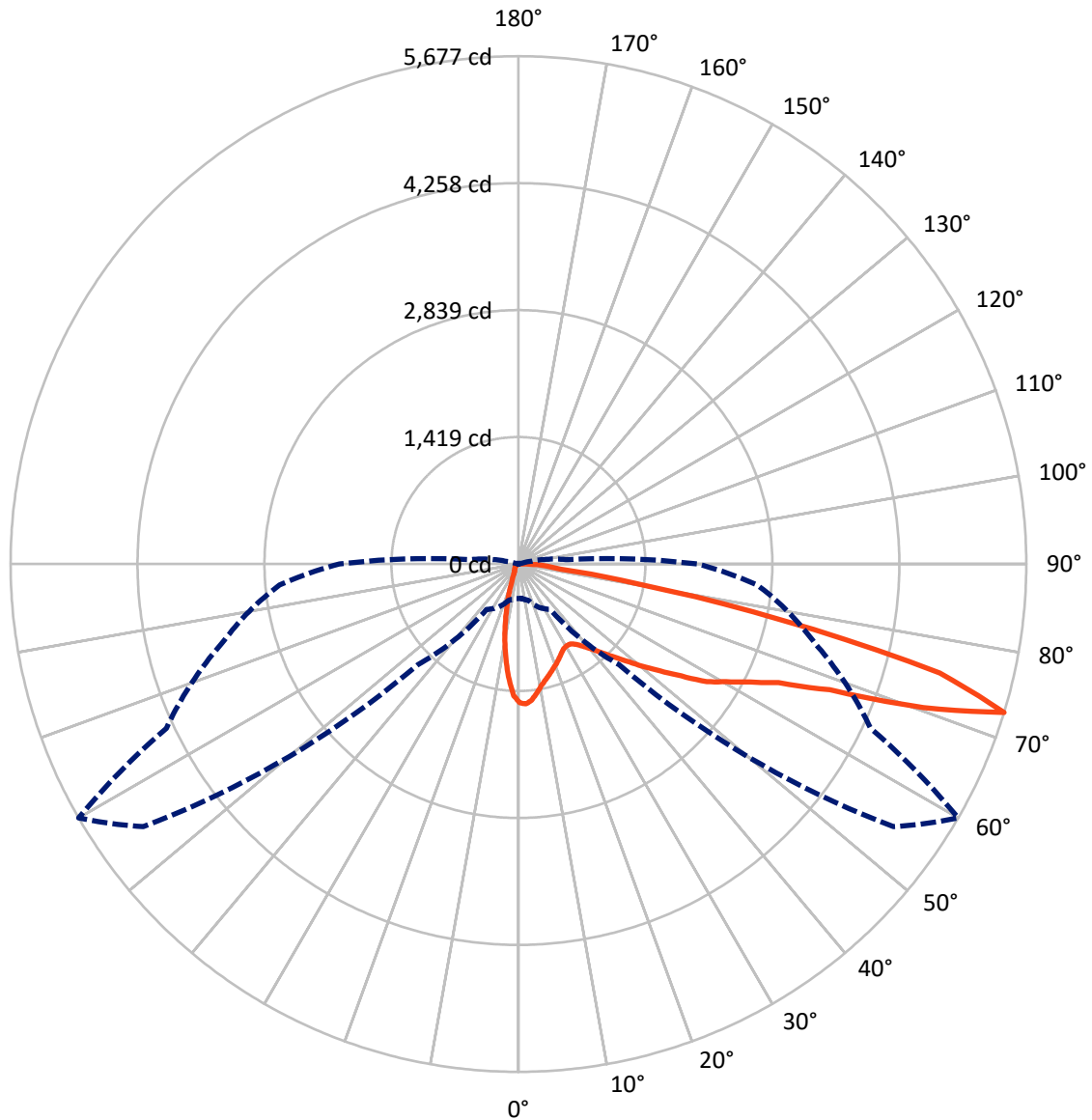
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.5 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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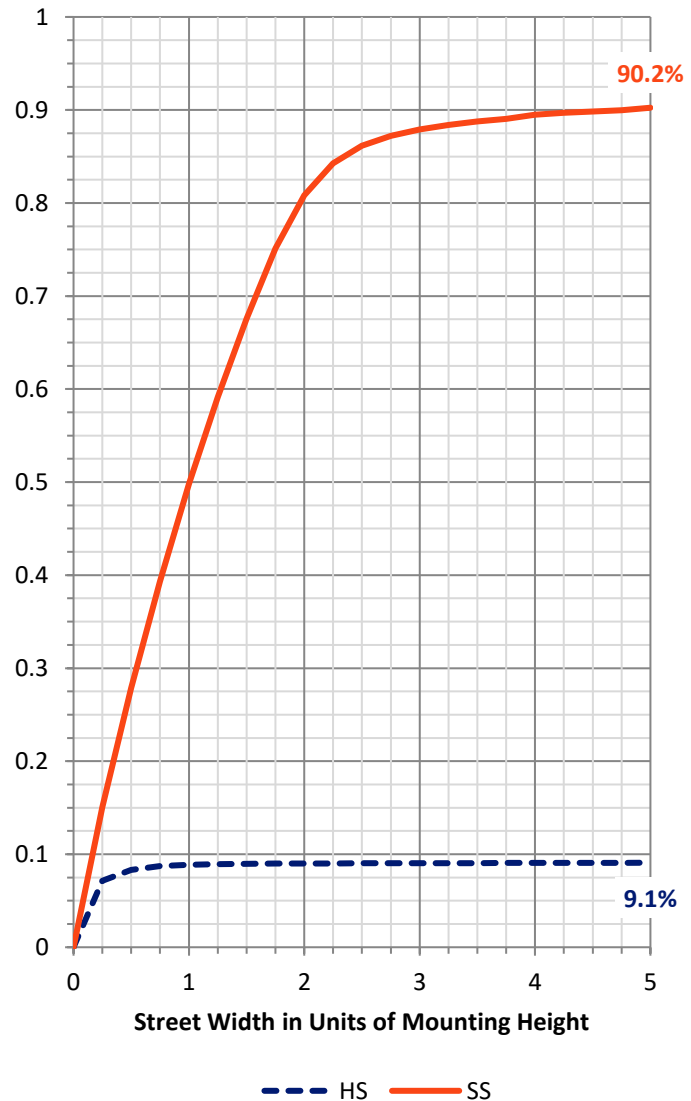
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	449.6	0.0	449.6
	% Fixture	9.2	0.0	9.2
<b>Street Side</b>	Lumens	4447.4	0.0	4447.4
	% Fixture	90.8	0.0	90.8
<b>Total</b>	Lumens	4897.0	0.0	4897.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.4	2.5
10°-20°	235.3	4.8
20°-30°	308.8	6.3
30°-40°	416.5	8.5
40°-50°	620.0	12.7
50°-60°	961.8	19.6
60°-70°	1319.3	26.9
70°-80°	831.7	17.0
80°-90°	83.3	1.7
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°	4897.0	100.0
0°-180°	4897.0	100.0



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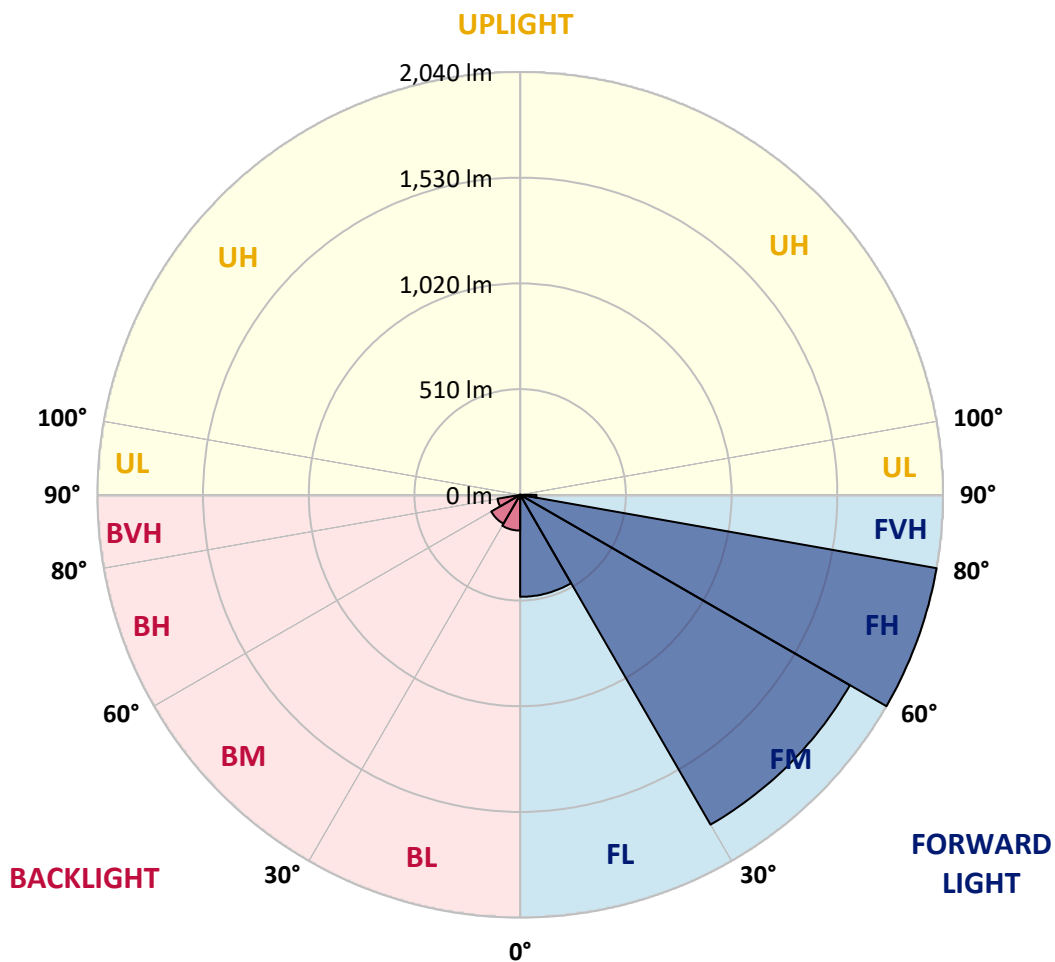
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	492.1	10.0			
FM	(30°-60°)	1836.9	37.5			
FH	(60°-80°)	2039.7	41.7			G2/5000
FVH	(80°-90°)	78.8	1.6			G1/100
BL	(0°-30°)	172.5	3.5	B1/500		
BM	(30°-60°)	161.4	3.3	B0/220		
BH	(60°-80°)	111.2	2.3	B1/500		G1/500
BVH	(80°-90°)	4.5	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 III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	1548.6	1548.6	1548.6	1548.6	1548.6	1548.6	1548.6	1548.6	1548.6	1548.6	1548.6
2.5°	1575.0	1572.3	1572.3	1575.0	1577.6	1569.7	1569.7	1567.1	1559.2	1556.5	1540.7
5°	1474.7	1482.7	1482.7	1493.2	1503.8	1509.0	1530.1	1530.1	1527.5	1527.5	1503.8
7.5°	1353.4	1353.4	1371.8	1390.3	1416.7	1424.6	1448.4	1458.9	1464.2	1477.4	1456.3
10°	1245.2	1253.1	1255.8	1282.2	1305.9	1334.9	1374.5	1387.7	1400.9	1427.2	1406.1
12.5°	1163.4	1168.7	1176.6	1200.4	1229.4	1261.0	1308.5	1332.3	1345.5	1382.4	1366.6
15°	1079.0	1084.3	1100.1	1121.2	1160.8	1200.4	1253.1	1284.8	1308.5	1350.7	1337.6
17.5°	1023.6	1026.2	1028.9	1047.4	1086.9	1139.7	1205.6	1237.3	1269.0	1321.7	1316.4
20°	997.2	999.9	997.2	1007.8	1031.5	1076.4	1155.5	1197.7	1232.0	1308.5	1300.6
22.5°	989.3	992.0	986.7	984.0	994.6	1034.2	1105.4	1152.9	1200.4	1305.9	1295.3
25°	994.6	994.6	986.7	978.8	978.8	999.9	1060.5	1110.7	1168.7	1311.2	1290.1
27.5°	1015.7	1013.1	1005.1	989.3	976.1	984.0	1031.5	1076.4	1139.7	1319.1	1290.1
30°	1042.1	1039.4	1036.8	1023.6	999.9	984.0	1018.3	1060.5	1123.9	1337.6	1292.7
32.5°	1071.1	1073.7	1073.7	1063.2	1036.8	1002.5	1026.2	1065.8	1126.5	1363.9	1300.6
35°	1123.9	1118.6	1126.5	1121.2	1092.2	1047.4	1065.8	1100.1	1152.9	1393.0	1319.1
37.5°	1174.0	1174.0	1184.5	1187.2	1160.8	1105.4	1129.1	1163.4	1195.1	1440.4	1353.4
40°	1232.0	1229.4	1245.2	1261.0	1239.9	1192.5	1216.2	1245.2	1274.2	1511.7	1411.4
42.5°	1279.5	1284.8	1308.5	1334.9	1342.8	1276.9	1316.4	1348.1	1361.3	1590.8	1498.5
45°	1324.4	1332.3	1377.1	1419.3	1445.7	1393.0	1437.8	1472.1	1485.3	1691.1	1604.0
47.5°	1371.8	1382.4	1437.8	1503.8	1551.2	1524.9	1575.0	1617.2	1625.1	1815.1	1762.3
50°	1422.0	1432.5	1495.8	1585.5	1664.7	1680.5	1743.8	1794.0	1786.0	1939.1	1923.2
52.5°	1485.3	1498.5	1585.5	1685.8	1794.0	1841.4	1939.1	1983.9	1960.2	2100.0	2071.0
55°	1651.5	1656.8	1717.4	1820.3	1931.1	2026.1	2168.6	2208.1	2147.5	2218.7	2221.3
57.5°	1933.8	1933.8	1947.0	1978.6	2081.5	2221.3	2448.2	2482.5	2369.1	2340.1	2353.2
60°	2102.6	2129.0	2184.4	2245.1	2292.6	2432.4	2669.8	2669.8	2508.9	2466.7	2472.0
62.5°	2060.4	2081.5	2245.1	2382.3	2596.0	2775.4	2909.9	2904.6	2667.2	2585.4	2622.3
65°	1509.0	1546.0	1757.0	2187.0	2714.7	3250.2	3310.9	3194.8	2862.4	2764.8	2915.2
67.5°	809.9	838.9	1015.7	1400.9	2142.2	3574.7	4134.0	3754.1	3213.3	3131.5	3213.3
70°	532.9	527.6	540.8	688.6	1171.3	2962.7	5236.8	4804.1	3796.3	3424.3	3215.9
72.5°	385.2	385.2	419.5	532.9	620.0	1590.8	5118.0	5677.3	4342.4	3432.3	2680.4
75°	258.5	263.8	319.2	430.0	577.8	522.4	3981.0	4864.8	4268.6	2577.5	1398.2
77.5°	134.5	142.5	211.1	340.3	530.3	467.0	2229.3	3012.8	2508.9	1184.5	311.3
80°	60.7	63.3	92.3	255.9	485.4	432.7	728.1	1342.8	794.1	142.5	52.8
82.5°	29.0	29.0	39.6	126.6	401.0	372.0	448.5	477.5	187.3	44.8	36.9
85°	10.6	10.6	21.1	71.2	237.4	224.2	382.5	319.2	105.5	29.0	26.4
87.5°	5.3	5.3	7.9	21.1	63.3	182.0	263.8	211.1	44.8	10.6	10.6
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1548.6	1548.6	1548.6	1548.6	1548.6	1548.6	1548.6	1548.6	1548.6	1548.6	1548.6
2.5°	1532.8	1524.9	1503.8	1485.3	1461.5	1429.9	1424.6	1393.0	1366.6	1363.9	1356.0
5°	1490.6	1466.8	1414.1	1337.6	1266.3	1208.3	1145.0	1105.4	1084.3	1060.5	1076.4
7.5°	1432.5	1393.0	1287.4	1168.7	1052.6	952.4	854.8	783.5	754.5	712.3	720.2
10°	1371.8	1316.4	1163.4	984.0	833.7	685.9	559.3	453.8	398.4	379.9	379.9
12.5°	1329.6	1250.5	1036.8	812.6	614.7	424.7	308.7	224.2	168.8	150.4	150.4
15°	1287.4	1189.8	920.7	649.0	406.3	245.3	147.7	126.6	124.0	124.0	124.0
17.5°	1250.5	1118.6	799.4	496.0	266.5	137.2	121.4	118.7	116.1	116.1	116.1
20°	1213.6	1055.3	696.5	356.2	147.7	116.1	110.8	110.8	110.8	110.8	108.2
22.5°	1179.3	999.9	585.7	245.3	113.4	105.5	102.9	102.9	102.9	100.3	100.3
25°	1152.9	949.7	485.4	155.7	100.3	97.6	95.0	92.3	89.7	89.7	89.7
27.5°	1126.5	902.3	379.9	108.2	92.3	87.1	84.4	81.8	76.5	76.5	73.9
30°	1108.0	854.8	303.4	92.3	84.4	79.1	73.9	68.6	63.3	60.7	60.7
32.5°	1097.5	817.8	226.9	84.4	76.5	68.6	63.3	58.0	52.8	47.5	47.5
35°	1089.6	780.9	155.7	76.5	68.6	60.7	55.4	47.5	39.6	36.9	36.9
37.5°	1102.8	754.5	105.5	71.2	63.3	55.4	44.8	39.6	34.3	31.7	31.7
40°	1131.8	733.4	84.4	66.0	58.0	47.5	39.6	31.7	26.4	23.7	23.7
42.5°	1181.9	725.5	73.9	63.3	52.8	42.2	31.7	26.4	23.7	21.1	21.1
45°	1274.2	722.9	68.6	58.0	47.5	34.3	26.4	21.1	18.5	15.8	15.8
47.5°	1377.1	728.1	66.0	55.4	42.2	31.7	23.7	18.5	15.8	13.2	13.2
50°	1503.8	749.2	60.7	50.1	39.6	26.4	18.5	15.8	10.6	10.6	10.6
52.5°	1625.1	770.3	58.0	47.5	34.3	23.7	15.8	10.6	10.6	7.9	7.9
55°	1743.8	817.8	52.8	47.5	31.7	18.5	13.2	10.6	7.9	5.3	5.3
57.5°	1862.5	852.1	50.1	42.2	26.4	15.8	10.6	7.9	5.3	5.3	5.3
60°	1983.9	883.8	44.8	36.9	21.1	13.2	7.9	5.3	5.3	5.3	5.3
62.5°	2136.9	936.5	39.6	31.7	18.5	10.6	7.9	5.3	2.6	2.6	2.6
65°	2424.5	1026.2	34.3	26.4	13.2	10.6	7.9	5.3	2.6	2.6	2.6
67.5°	2609.1	1013.1	29.0	21.1	13.2	7.9	5.3	5.3	2.6	2.6	2.6
70°	2572.2	915.4	23.7	18.5	10.6	7.9	5.3	5.3	2.6	2.6	2.6
72.5°	1999.7	556.7	21.1	15.8	10.6	7.9	5.3	5.3	2.6	2.6	2.6
75°	912.8	124.0	18.5	13.2	7.9	7.9	5.3	5.3	2.6	2.6	2.6
77.5°	160.9	31.7	15.8	10.6	10.6	7.9	7.9	5.3	2.6	2.6	2.6
80°	42.2	21.1	15.8	10.6	10.6	13.2	10.6	7.9	2.6	2.6	2.6
82.5°	29.0	15.8	15.8	13.2	13.2	15.8	13.2	7.9	2.6	2.6	2.6
85°	21.1	13.2	15.8	15.8	10.6	13.2	13.2	7.9	2.6	2.6	2.6
87.5°	10.6	5.3	5.3	5.3	5.3	7.9	7.9	2.6	2.6	2.6	2.6
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)