

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: P459874

Luminaire Tested: **NAV-SA6A-AMB-U-SL2-HSS**

Issue Date: 1/6/2021

Test Information

Test Method: LM-79-08
Report Number: P459874
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2003-697-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SA6A-AMB-U-SL2-HSS
Description: NAVION AREA AND ROADWAY LUMINAIRE
(6) NARROW BAND AMBER, 500mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4794 lumens
Efficiency: N/A
Efficacy: 40.3 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

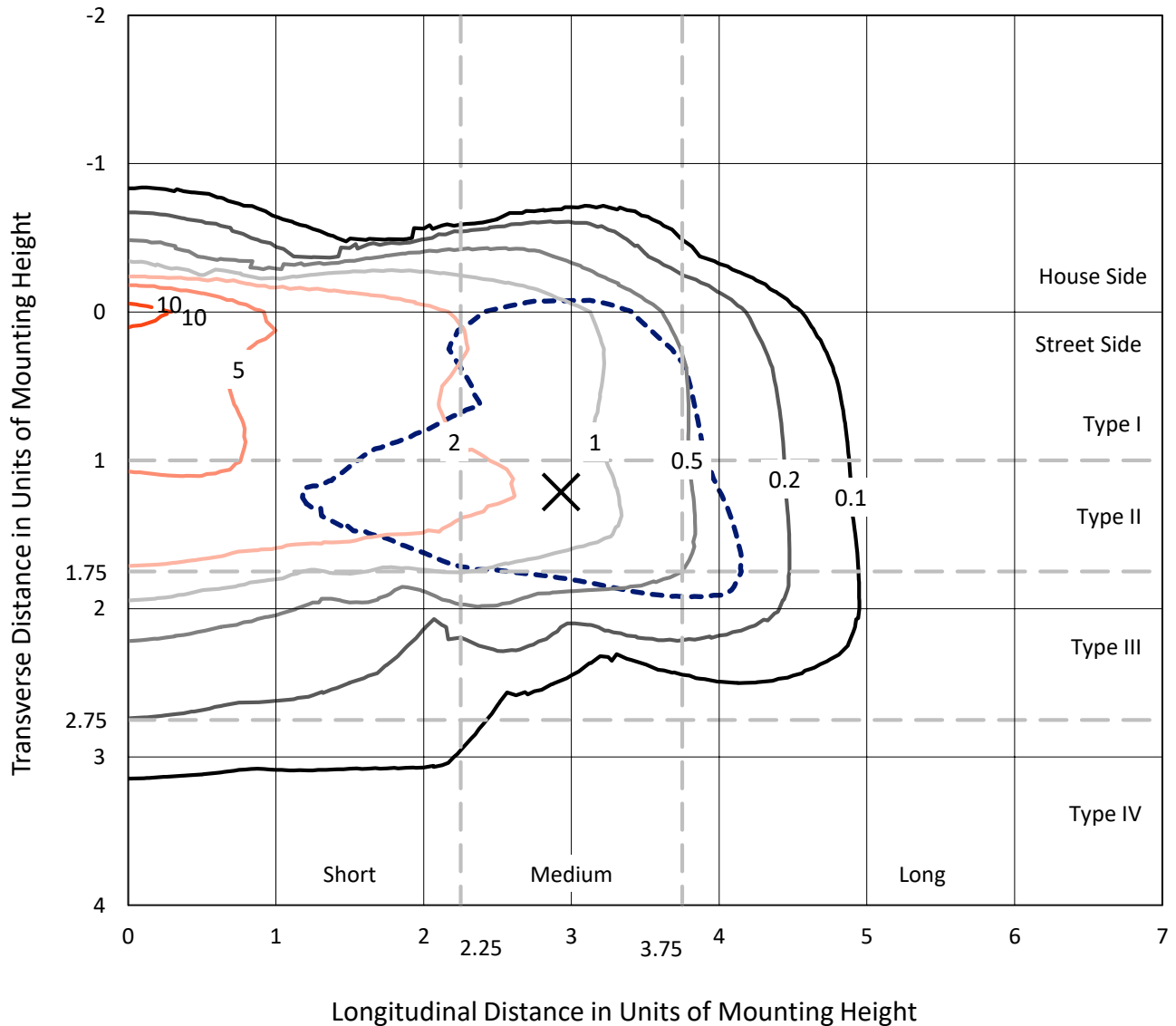
Input Watts (W): 119
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

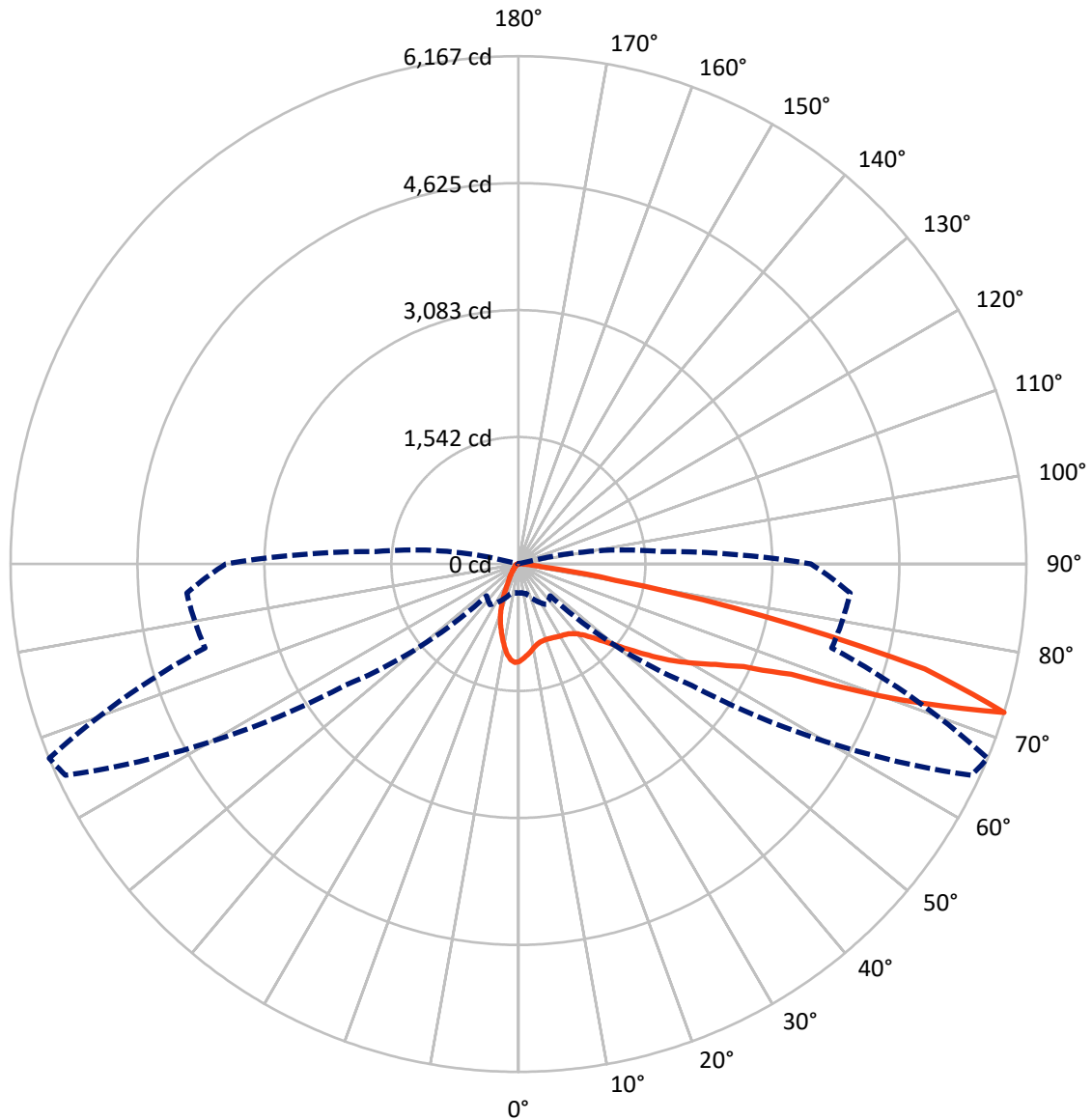
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.8 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67.5-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical



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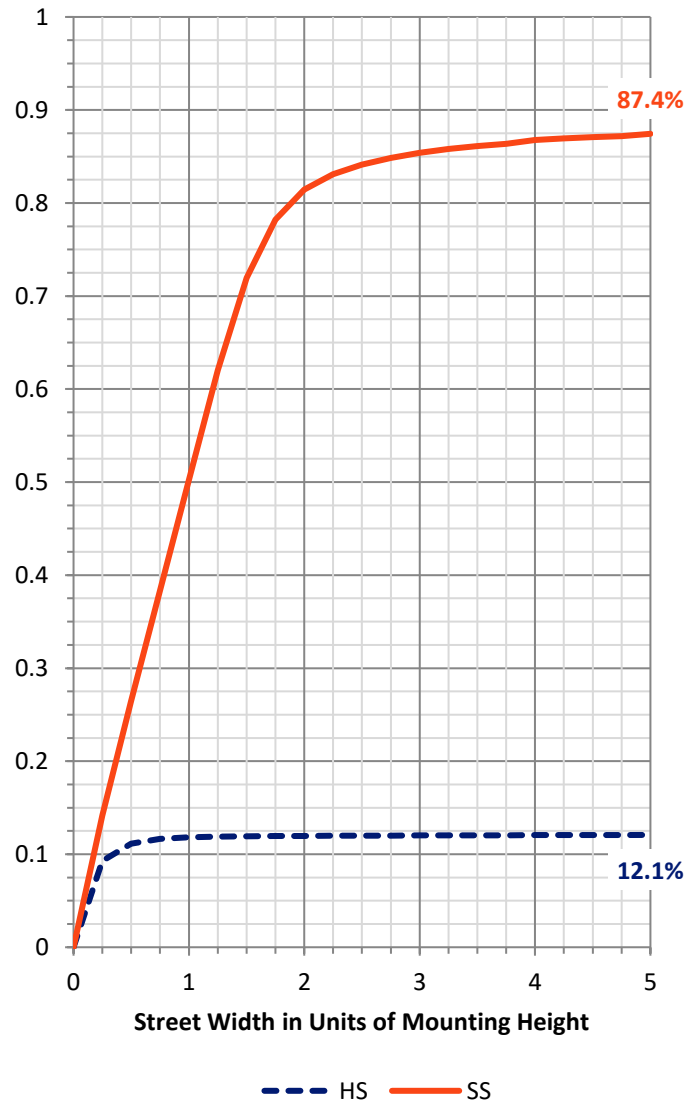
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	584.8	0.0	584.8
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	4209.2	0.0	4209.2
	% Fixture	87.8	0.0	87.8
Total	Lumens	4794.0	0.0	4794.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.8	2.0
10°-20°	206.1	4.3
20°-30°	291.1	6.1
30°-40°	417.0	8.7
40°-50°	629.2	13.1
50°-60°	1008.7	21.0
60°-70°	1192.5	24.9
70°-80°	871.1	18.2
80°-90°	80.5	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°	4794.0	100.0
0°-180°	4794.0	100.0



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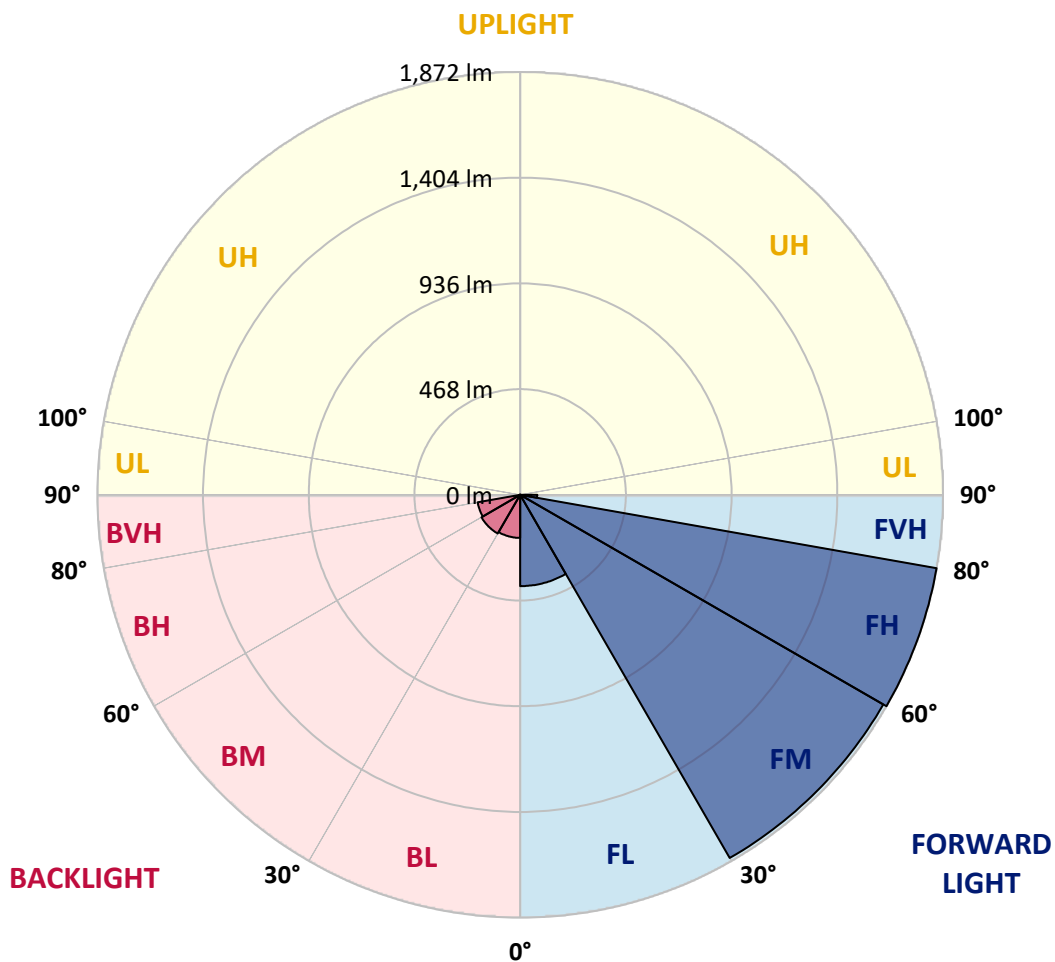
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	404.4	8.4			
FM	(30°-60°)	1856.9	38.7			
FH	(60°-80°)	1872.5	39.1			G2/5000
FVH	(80°-90°)	75.5	1.6			G1/100
BL	(0°-30°)	190.7	4.0	B1/500		
BM	(30°-60°)	198.0	4.1	B0/220		
BH	(60°-80°)	191.1	4.0	B1/500		G1/500
BVH	(80°-90°)	5.0	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°	65°	67.5°	75°	85°
0°	1184.7	1184.7	1184.7	1184.7	1184.7	1184.7	1184.7	1184.7	1184.7	1184.7	1184.7
2.5°	1110.9	1116.1	1116.1	1124.1	1126.7	1129.3	1145.2	1150.4	1147.8	1163.6	1174.2
5°	1037.0	1037.0	1042.3	1055.5	1066.0	1073.9	1092.4	1108.2	1110.9	1129.3	1158.4
7.5°	976.3	981.6	981.6	989.5	1005.3	1018.5	1042.3	1068.6	1073.9	1097.7	1132.0
10°	928.8	926.2	934.1	942.0	955.2	968.4	994.8	1023.8	1034.3	1060.7	1100.3
12.5°	883.9	886.6	889.2	902.4	918.2	931.4	957.8	992.1	1002.7	1037.0	1084.5
15°	857.6	857.6	860.2	868.1	883.9	902.4	934.1	971.0	984.2	1023.8	1079.2
17.5°	849.6	849.6	847.0	849.6	862.8	881.3	918.2	963.1	976.3	1018.5	1087.1
20°	852.3	852.3	847.0	844.4	852.3	870.8	913.0	960.5	976.3	1026.4	1108.2
22.5°	868.1	865.5	860.2	852.3	852.3	870.8	915.6	965.7	981.6	1037.0	1126.7
25°	907.7	897.1	891.9	876.0	865.5	873.4	918.2	973.7	989.5	1044.9	1153.1
27.5°	944.6	942.0	942.0	926.2	891.9	883.9	928.8	986.9	1000.0	1055.5	1187.4
30°	1008.0	1002.7	1002.7	984.2	942.0	905.1	939.4	997.4	1013.2	1063.4	1221.7
32.5°	1087.1	1089.8	1084.5	1060.7	1008.0	944.6	957.8	1010.6	1023.8	1068.6	1256.0
35°	1174.2	1176.8	1190.0	1163.6	1095.0	1005.3	986.9	1034.3	1042.3	1079.2	1282.4
37.5°	1245.4	1245.4	1279.7	1285.0	1200.6	1079.2	1034.3	1073.9	1071.3	1092.4	1308.8
40°	1324.6	1324.6	1364.2	1395.8	1335.2	1179.5	1095.0	1121.4	1116.1	1121.4	1345.7
42.5°	1409.0	1414.3	1456.5	1511.9	1480.3	1308.8	1182.1	1195.3	1184.7	1168.9	1385.3
45°	1490.8	1504.0	1562.1	1636.0	1633.3	1461.8	1295.6	1298.2	1279.7	1248.1	1467.1
47.5°	1585.8	1596.4	1678.2	1770.5	1794.3	1636.0	1440.7	1430.1	1406.4	1356.3	1577.9
50°	1746.8	1752.1	1810.1	1918.3	1963.1	1828.6	1604.3	1585.8	1559.4	1496.1	1728.3
52.5°	1939.4	1936.8	1963.1	2076.6	2198.0	2052.9	1818.0	1791.6	1749.4	1667.6	1913.0
55°	2023.8	2031.8	2071.3	2208.5	2443.4	2380.1	2058.1	2021.2	1976.3	1870.8	2103.0
57.5°	1876.1	1876.1	1955.2	2171.6	2580.6	2812.8	2327.3	2269.2	2213.8	2079.2	2319.4
60°	1501.4	1498.7	1593.7	1855.0	2477.7	3190.1	2702.0	2527.8	2443.4	2264.0	2535.7
62.5°	1052.8	1031.7	1073.9	1292.9	2029.1	3195.4	3401.2	2797.0	2683.5	2453.9	2765.3
65°	754.7	741.5	749.4	810.1	1163.6	2889.3	4174.3	3205.9	3002.8	2654.5	3042.4
67.5°	617.4	601.6	599.0	672.9	670.2	1913.0	4406.5	4013.4	3570.1	2947.4	3356.4
70°	493.4	485.5	482.9	588.4	620.1	622.7	4108.4	5739.0	4952.7	3382.7	3775.9
72.5°	350.9	350.9	372.0	488.1	601.6	546.2	2570.0	6068.9	6166.5	3939.5	4042.4
75°	211.1	208.5	261.2	387.9	580.5	527.7	794.2	5008.1	5097.9	3688.8	3126.8
77.5°	100.3	100.3	145.1	261.2	514.5	496.1	453.8	2994.9	3016.0	2240.2	1585.8
80°	39.6	39.6	63.3	161.0	390.5	490.8	422.2	1234.9	1190.0	617.4	219.0
82.5°	15.8	15.8	26.4	89.7	242.8	403.7	374.7	409.0	306.1	71.2	58.1
85°	2.6	5.3	10.6	52.8	137.2	213.7	303.4	253.3	161.0	42.2	42.2
87.5°	0.0	2.6	5.3	15.8	39.6	89.7	153.0	116.1	73.9	13.2	18.5
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°	1184.7	1184.7	1184.7	1184.7	1184.7	1184.7	1184.7	1184.7	1184.7	1184.7	1184.7
2.5°	1176.8	1182.1	1192.7	1197.9	1200.6	1190.0	1190.0	1179.5	1176.8	1176.8	1176.8
5°	1163.6	1174.2	1182.1	1163.6	1134.6	1097.7	1055.5	1029.1	1002.7	1008.0	997.4
7.5°	1147.8	1161.0	1150.4	1089.8	1015.9	947.3	873.4	831.2	781.0	775.8	762.6
10°	1124.1	1137.3	1097.7	992.1	878.7	778.4	670.2	604.2	551.5	509.3	498.7
12.5°	1118.8	1126.7	1034.3	889.2	741.5	599.0	459.1	335.1	261.2	224.3	224.3
15°	1121.4	1121.4	976.3	786.3	593.7	395.8	221.6	161.0	134.6	131.9	129.3
17.5°	1134.6	1118.8	918.2	686.0	435.4	205.8	131.9	121.4	116.1	116.1	116.1
20°	1158.4	1118.8	868.1	580.5	274.4	129.3	113.5	108.2	105.5	102.9	102.9
22.5°	1182.1	1108.2	804.8	459.1	158.3	108.2	100.3	97.6	92.4	89.7	89.7
25°	1208.5	1097.7	744.1	329.8	110.8	95.0	87.1	81.8	76.5	73.9	73.9
27.5°	1232.2	1087.1	672.9	208.5	97.6	84.4	76.5	68.6	60.7	58.1	58.1
30°	1248.1	1068.6	604.2	131.9	87.1	76.5	66.0	55.4	47.5	44.9	44.9
32.5°	1250.7	1044.9	519.8	97.6	79.2	66.0	52.8	44.9	39.6	36.9	36.9
35°	1242.8	1015.9	427.5	87.1	71.2	58.1	44.9	36.9	31.7	31.7	31.7
37.5°	1232.2	986.9	332.5	79.2	63.3	50.1	36.9	31.7	29.0	26.4	26.4
40°	1229.6	957.8	221.6	73.9	58.1	42.2	31.7	26.4	23.7	21.1	21.1
42.5°	1237.5	936.7	155.7	68.6	50.1	36.9	29.0	23.7	18.5	18.5	15.8
45°	1277.1	931.4	113.5	63.3	44.9	31.7	23.7	18.5	15.8	13.2	13.2
47.5°	1343.1	942.0	92.4	58.1	39.6	26.4	21.1	15.8	13.2	10.6	10.6
50°	1438.1	981.6	84.4	52.8	31.7	23.7	15.8	13.2	10.6	10.6	10.6
52.5°	1585.8	1044.9	79.2	47.5	26.4	18.5	13.2	10.6	7.9	7.9	7.9
55°	1744.1	1118.8	76.5	42.2	23.7	15.8	10.6	7.9	7.9	5.3	5.3
57.5°	1926.2	1216.4	71.2	36.9	21.1	15.8	10.6	7.9	5.3	5.3	5.3
60°	2155.8	1348.3	63.3	31.7	18.5	13.2	7.9	5.3	5.3	5.3	5.3
62.5°	2393.2	1485.6	55.4	26.4	15.8	10.6	7.9	5.3	5.3	5.3	5.3
65°	2683.5	1643.9	47.5	21.1	13.2	10.6	7.9	5.3	5.3	2.6	2.6
67.5°	3034.4	1804.8	36.9	18.5	13.2	7.9	7.9	5.3	5.3	2.6	2.6
70°	3483.0	2010.6	31.7	15.8	10.6	7.9	7.9	5.3	5.3	2.6	2.6
72.5°	3551.6	1736.2	26.4	15.8	10.6	7.9	7.9	5.3	5.3	2.6	2.6
75°	2427.5	828.5	23.7	13.2	10.6	10.6	7.9	5.3	5.3	2.6	2.6
77.5°	1058.1	195.3	21.1	13.2	10.6	10.6	10.6	7.9	5.3	2.6	2.6
80°	124.0	36.9	18.5	13.2	10.6	13.2	10.6	7.9	5.3	2.6	2.6
82.5°	50.1	23.7	18.5	15.8	13.2	10.6	10.6	7.9	5.3	2.6	2.6
85°	36.9	18.5	18.5	18.5	13.2	7.9	7.9	5.3	5.3	2.6	2.6
87.5°	18.5	7.9	5.3	5.3	5.3	5.3	5.3	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)