

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: P197083

Luminaire Tested: **NAV-AF-01-D-UNV-SL3-8030-1200-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P197083
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24263)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-AF-01-D-UNV-SL3-8030-1200-HSS
Description: NAVION ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1200mA LIGHTSQUARE 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: 4642 lumens
Efficiency: N/A
Efficacy: 69.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 67
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

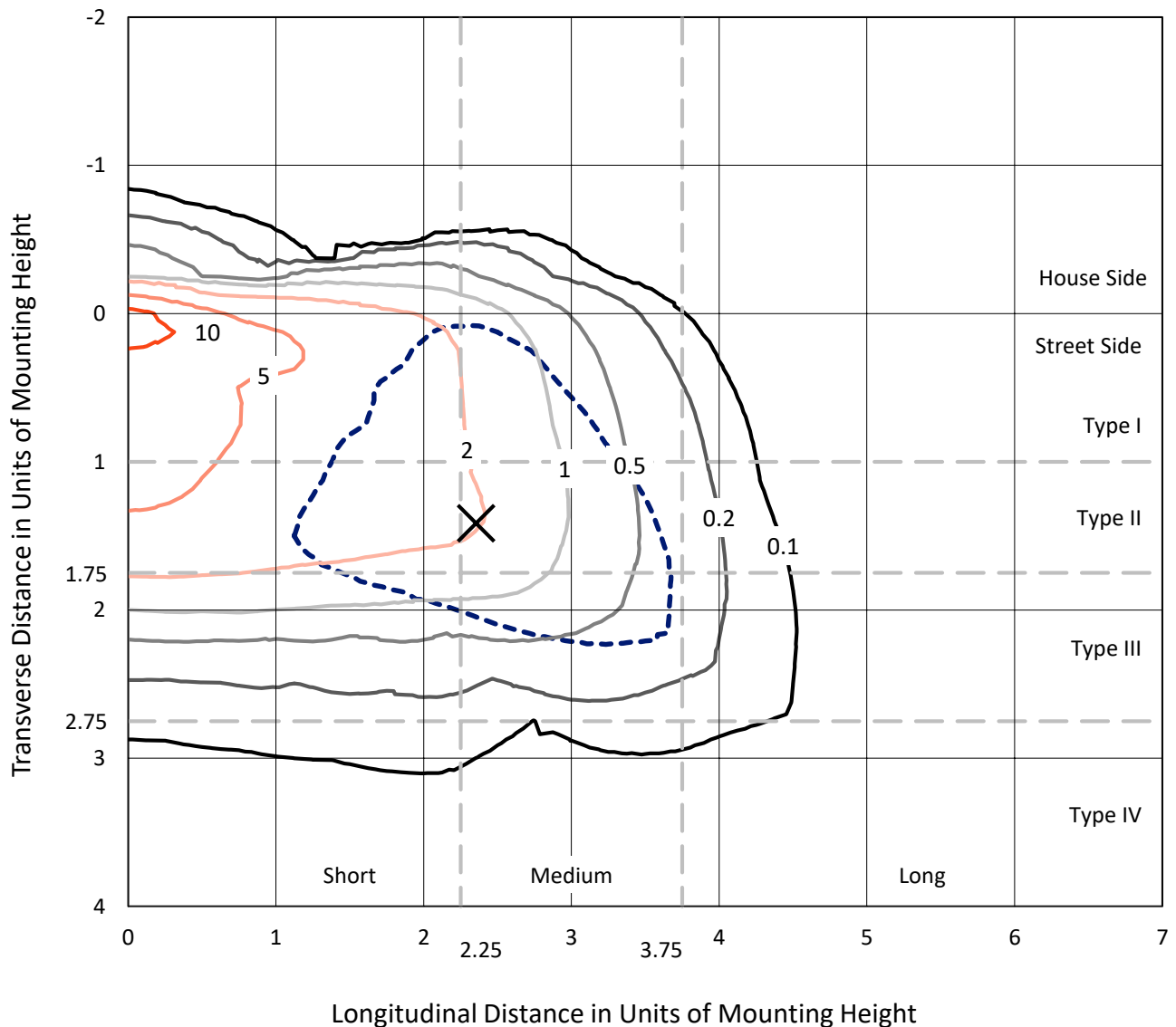


REPORT NUMBER: P197083

CATALOG NUMBER: NAV-AF-01-D-UNV-SL3-8030-1200-HSS

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

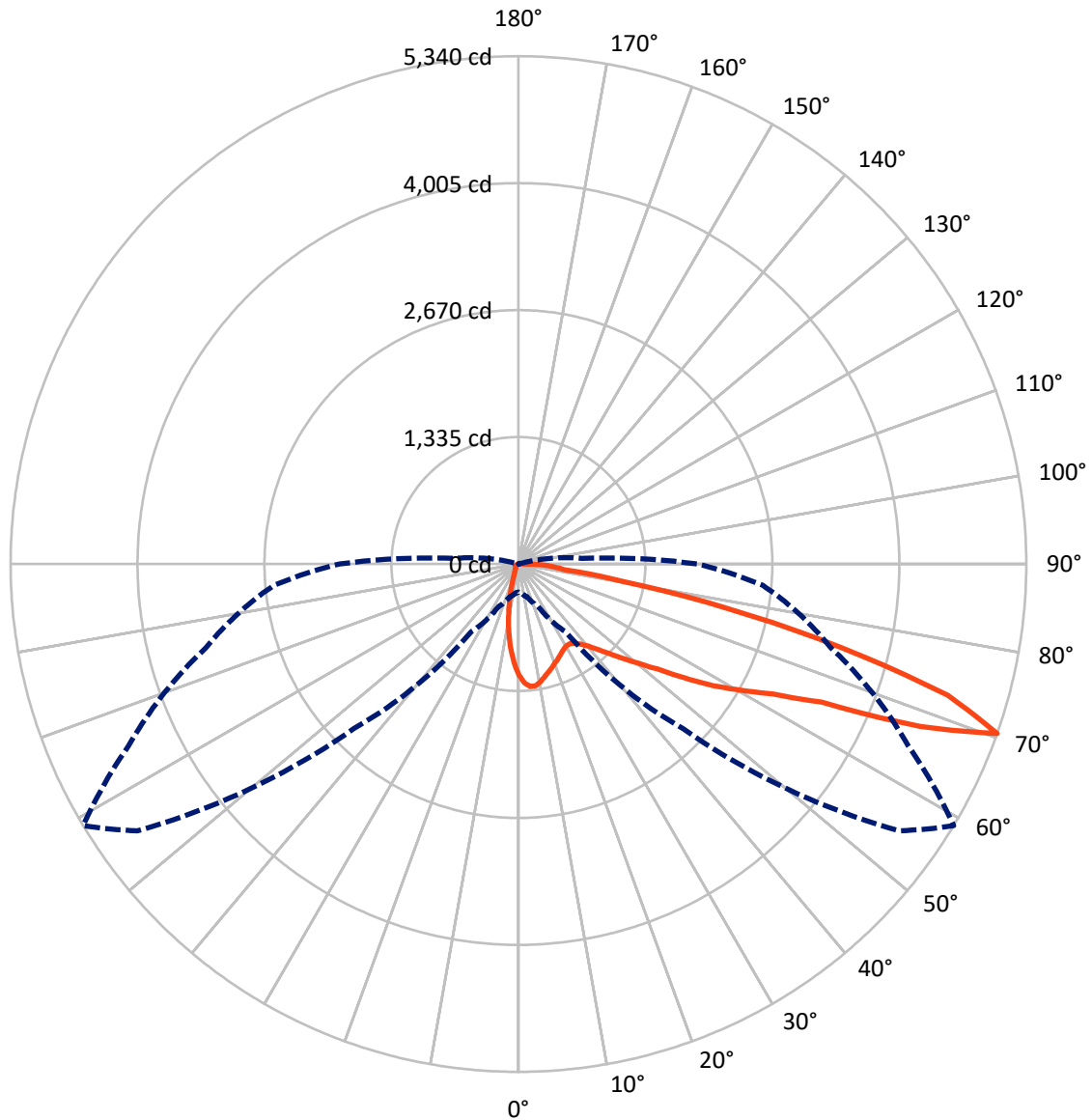


Based on 10 foot mounting height. Maximum calculated value = 12.5 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P197083

CATALOG NUMBER: NAV-AF-01-D-UNV-SL3-8030-1200-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P197083

CATALOG NUMBER: NAV-AF-01-D-UNV-SL3-8030-1200-HSS

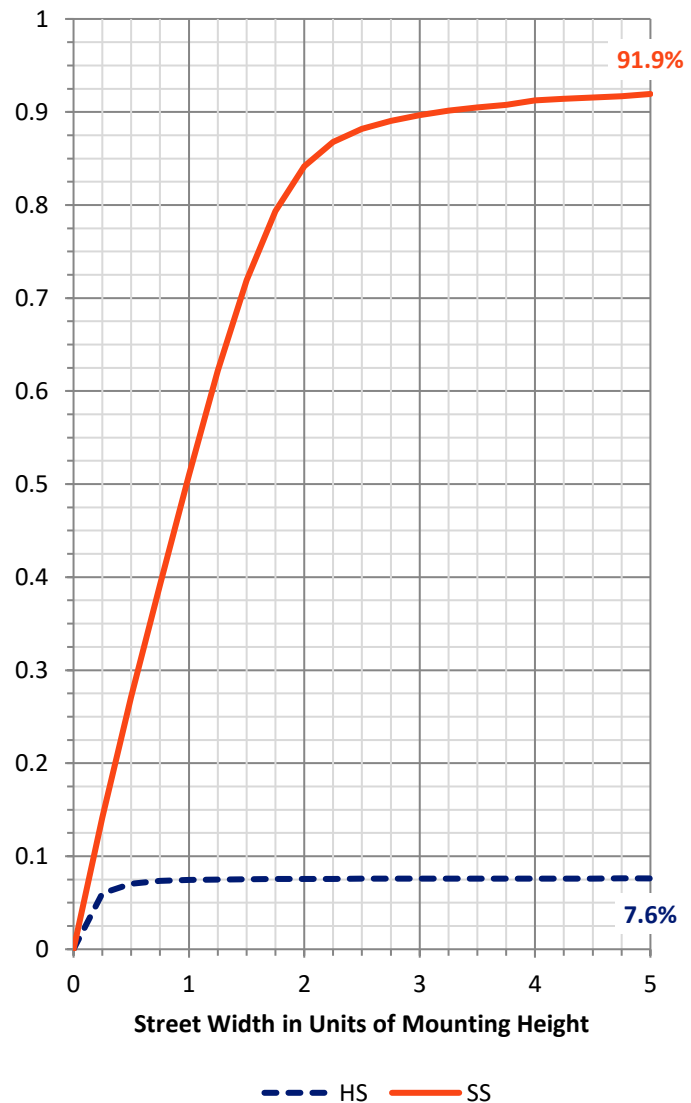
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	356.9	0.0	356.9
	% Fixture	7.7	0.0	7.7
Street Side	Lumens	4285.2	0.0	4285.2
	% Fixture	92.3	0.0	92.3
Total	Lumens	4642.0	0.0	4642.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.5	2.1
10°-20°	202.4	4.4
20°-30°	274.0	5.9
30°-40°	395.5	8.5
40°-50°	656.8	14.1
50°-60°	1004.7	21.6
60°-70°	1249.6	26.9
70°-80°	690.8	14.9
80°-90°	71.6	1.5
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°	4642.0	100.0
0°-180°	4642.0	100.0



REPORT NUMBER: P197083

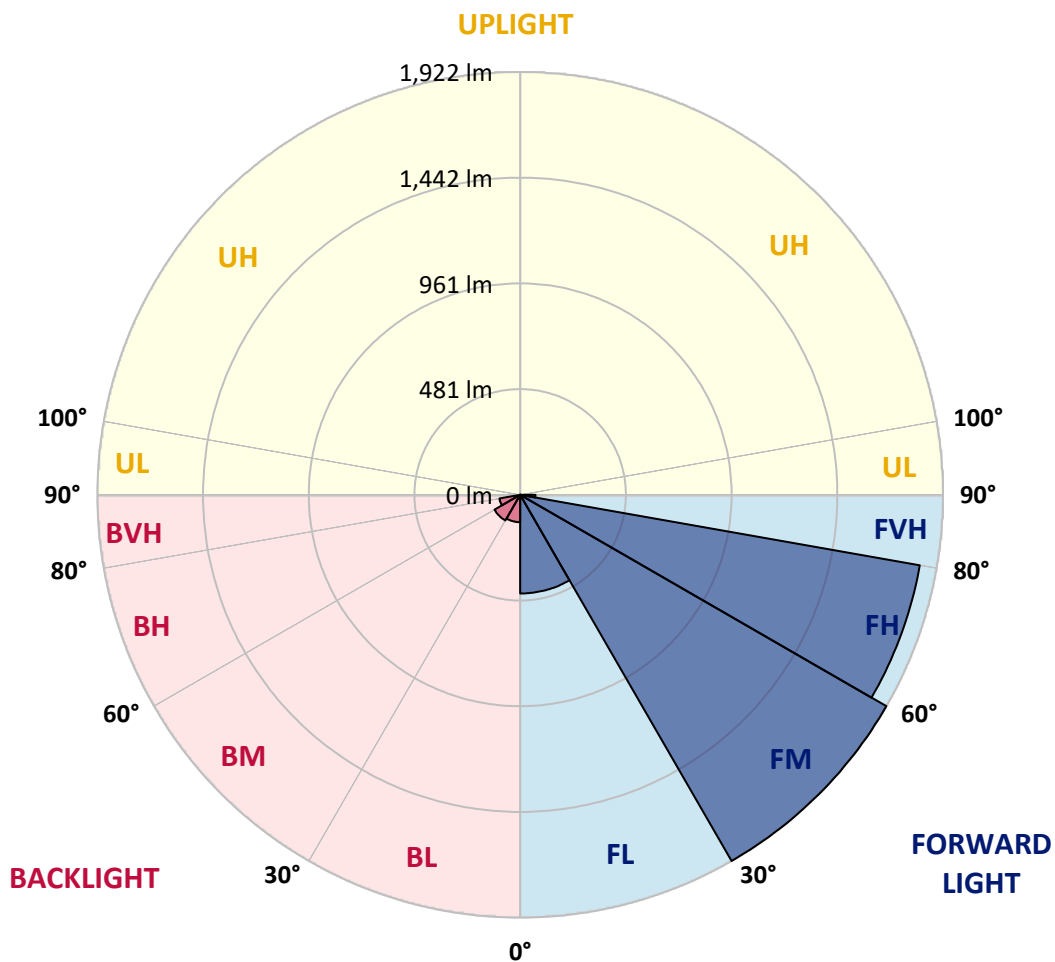
CATALOG NUMBER: NAV-AF-01-D-UNV-SL3-8030-1200-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	448.7	9.7			
FM	(30°-60°)	1922.3	41.4			
FH	(60°-80°)	1844.6	39.7			G2/5000
FVH	(80°-90°)	69.6	1.5			G1/100
BL	(0°-30°)	124.4	2.7	B1/500		
BM	(30°-60°)	134.7	2.9	B0/220		
BH	(60°-80°)	95.7	2.1	B0/110		G0/110
BVH	(80°-90°)	2.1	0.0			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





REPORT NUMBER: P197083

CATALOG NUMBER: NAV-AF-01-D-UNV-SL3-8030-1200-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1173.8	1173.8	1173.8	1173.8	1173.8	1173.8	1173.8	1173.8	1173.8	1173.8	1173.8
2.5°	1326.8	1324.7	1316.0	1314.2	1304.4	1284.8	1262.0	1252.9	1234.4	1205.0	1172.4
5°	1348.9	1349.9	1350.6	1346.8	1345.4	1329.3	1304.1	1293.2	1268.3	1220.0	1160.5
7.5°	1266.2	1269.0	1277.8	1281.6	1298.5	1304.8	1299.5	1292.5	1272.9	1215.8	1132.1
10°	1179.0	1184.3	1193.8	1200.1	1220.7	1237.5	1258.9	1260.6	1256.4	1201.8	1100.3
12.5°	1104.1	1109.0	1119.5	1132.1	1153.1	1174.8	1206.7	1217.9	1231.9	1192.7	1077.5
15°	1039.7	1041.1	1051.2	1067.0	1094.7	1124.4	1162.2	1178.7	1206.0	1189.2	1060.0
17.5°	983.3	983.6	990.3	1004.7	1038.3	1077.5	1121.6	1143.3	1178.0	1184.3	1044.6
20°	946.2	945.8	946.2	953.9	983.6	1030.2	1083.8	1106.6	1151.0	1178.3	1028.8
22.5°	933.6	931.8	923.8	921.0	939.9	980.8	1044.9	1074.7	1126.9	1176.6	1017.3
25°	949.0	947.9	930.8	914.7	916.4	942.0	1005.4	1041.8	1108.0	1182.9	1014.5
27.5°	998.7	996.6	970.3	938.8	918.9	923.4	975.9	1014.1	1092.9	1198.3	1018.3
30°	1063.8	1064.2	1036.2	998.0	951.1	925.2	960.2	996.3	1082.7	1221.4	1026.7
32.5°	1136.3	1136.0	1116.0	1071.9	1012.0	957.4	967.2	997.7	1084.1	1255.4	1042.8
35°	1211.3	1207.4	1200.8	1161.9	1091.9	1013.8	999.1	1021.5	1098.9	1300.2	1070.1
37.5°	1297.8	1296.4	1303.0	1262.0	1190.6	1096.8	1055.1	1070.1	1136.0	1366.4	1114.3
40°	1435.4	1427.7	1430.8	1375.1	1302.0	1208.5	1133.5	1137.4	1195.2	1453.9	1183.9
42.5°	1697.7	1666.5	1608.0	1503.7	1424.5	1332.4	1236.1	1229.5	1278.8	1560.0	1275.7
45°	2011.1	1975.4	1827.9	1645.5	1547.1	1465.5	1362.9	1345.0	1381.8	1686.5	1394.1
47.5°	2272.7	2234.1	2038.7	1793.6	1671.7	1602.8	1503.3	1482.3	1505.1	1833.2	1536.2
50°	2361.9	2340.6	2169.0	1916.9	1797.5	1756.8	1679.5	1644.4	1650.0	1991.5	1702.2
52.5°	2321.0	2313.6	2198.8	2001.3	1913.7	1927.0	1872.4	1835.6	1829.3	2164.4	1885.7
55°	2234.5	2231.0	2175.0	2048.2	2016.3	2082.9	2143.1	2111.2	2051.7	2348.3	2037.3
57.5°	2110.9	2124.2	2164.4	2138.5	2142.4	2247.4	2394.5	2411.0	2322.0	2494.7	2149.7
60°	1780.7	1816.4	2000.9	2235.5	2415.2	2521.3	2663.8	2694.6	2551.0	2594.8	2279.7
62.5°	1316.3	1367.4	1630.4	2061.5	2565.4	3042.0	3022.0	3008.4	2769.6	2728.9	2516.0
65°	773.2	833.1	1055.4	1610.8	2338.8	3376.8	3690.9	3501.8	3102.6	3007.7	2892.5
67.5°	385.2	385.5	486.0	850.2	1728.5	3143.2	4667.2	4557.9	3810.6	3418.4	3040.9
70°	296.3	304.3	359.6	494.1	874.0	2448.1	4890.9	5339.5	4522.2	3400.2	2580.1
72.5°	251.1	256.3	320.1	430.0	653.4	1344.0	4234.0	4719.7	4315.2	2872.9	1901.8
75°	180.7	184.9	283.3	390.1	601.6	666.7	2904.4	3500.4	3237.7	2020.9	1046.7
77.5°	44.8	44.5	98.8	316.6	538.2	555.4	1666.5	2244.6	1857.7	827.5	268.9
80°	20.0	19.3	22.4	66.5	500.8	524.2	732.9	1133.5	712.6	134.1	82.3
82.5°	14.0	13.3	14.0	24.5	167.4	486.4	443.0	491.3	260.9	45.9	35.0
85°	4.6	4.2	7.7	20.7	46.9	280.5	432.1	367.0	194.0	19.6	23.5
87.5°	0.7	0.7	2.8	11.2	13.7	93.5	253.5	254.2	87.2	11.6	10.5
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: P197083

CATALOG NUMBER: NAV-AF-01-D-UNV-SL3-8030-1200-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1173.8	1173.8	1173.8	1173.8	1173.8	1173.8	1173.8	1173.8	1173.8	1173.8	1173.8
2.5°	1155.9	1135.3	1106.2	1077.1	1050.9	1023.9	1002.2	992.1	987.5	981.2	967.5
5°	1129.3	1091.9	1028.1	965.4	907.0	850.9	803.0	775.6	746.2	744.8	730.5
7.5°	1086.6	1033.4	932.9	835.5	746.2	660.8	587.2	539.6	507.1	486.7	472.7
10°	1039.0	970.7	837.6	700.7	579.2	465.0	370.5	308.9	271.4	252.5	241.6
12.5°	1001.2	915.4	743.8	571.5	419.2	288.2	200.3	155.5	135.5	127.8	124.3
15°	968.6	864.6	655.9	455.9	279.8	165.6	115.9	101.2	98.0	98.0	97.7
17.5°	935.7	815.6	570.4	342.5	176.1	108.6	91.4	89.3	89.6	90.7	90.7
20°	904.5	769.0	488.1	244.1	115.6	86.8	83.0	82.3	83.3	84.7	84.4
22.5°	879.3	728.0	411.1	167.7	88.9	78.8	76.3	75.3	76.0	77.0	76.7
25°	861.4	693.0	340.4	117.0	77.4	71.8	69.0	67.6	66.9	67.6	67.2
27.5°	850.6	663.6	273.8	87.9	69.3	64.8	61.3	58.5	56.7	56.7	56.0
30°	843.6	635.9	214.7	72.8	62.7	57.8	52.9	49.0	46.2	45.5	45.2
32.5°	843.2	612.1	160.4	64.4	56.4	50.8	44.8	39.9	36.8	36.1	35.7
35°	852.0	592.9	118.0	58.1	50.8	44.1	37.5	32.2	29.4	29.4	29.1
37.5°	874.7	581.6	89.3	53.2	46.2	38.5	31.5	26.6	24.2	24.9	24.9
40°	917.1	579.5	72.8	49.4	42.4	33.6	25.6	21.7	20.7	21.7	21.7
42.5°	981.9	590.7	64.8	46.6	38.9	28.7	21.4	18.6	18.2	19.3	19.3
45°	1066.3	612.8	60.2	44.1	35.0	23.8	17.9	16.1	15.8	17.2	17.2
47.5°	1168.5	642.6	56.0	41.3	31.2	19.6	15.1	13.7	13.7	15.1	15.4
50°	1289.7	682.8	51.8	38.5	28.0	16.5	12.6	11.6	11.9	13.3	13.7
52.5°	1429.1	732.2	48.0	36.1	24.5	13.3	10.5	9.8	10.2	11.6	11.9
55°	1549.2	775.3	43.4	33.6	20.0	10.9	8.8	8.4	8.8	10.5	10.5
57.5°	1653.9	816.6	39.2	29.8	15.8	8.8	7.0	7.0	7.7	9.5	9.8
60°	1792.9	881.7	35.7	25.2	11.9	6.7	5.6	6.0	7.0	8.4	8.8
62.5°	2039.1	992.4	31.2	21.0	8.8	5.3	4.6	4.9	6.3	8.1	8.4
65°	2347.2	1097.1	25.9	17.5	6.7	3.9	3.5	4.6	6.3	8.1	8.4
67.5°	2315.7	954.2	20.3	14.0	4.9	3.2	2.8	4.2	6.0	8.1	8.4
70°	1878.0	668.8	15.1	9.5	3.9	2.8	2.8	4.2	6.0	7.7	8.1
72.5°	1302.7	372.2	11.6	6.3	3.5	2.8	2.5	3.9	5.6	7.7	8.1
75°	619.8	114.2	9.1	4.6	3.2	2.5	2.1	3.9	5.6	7.7	8.1
77.5°	119.1	29.1	7.4	3.9	2.8	2.5	2.1	3.5	5.6	7.4	7.7
80°	40.3	13.0	6.0	3.5	2.8	2.5	2.1	3.5	5.3	7.0	7.4
82.5°	22.1	7.4	5.3	3.2	2.8	2.1	1.8	3.2	4.9	7.0	7.4
85°	17.2	5.3	4.2	3.2	2.8	2.1	1.8	3.2	4.9	6.7	7.0
87.5°	8.8	3.9	3.5	3.2	2.8	2.1	1.8	2.8	4.6	6.3	7.0
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)