

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: P270262

Luminaire Tested: **NAV-AF-01-D-UNV-RW-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P270262
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24161)
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-RW-7027-600
Description: NAVION ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 615mA LIGHTSQUARE WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3573.6 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 34
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

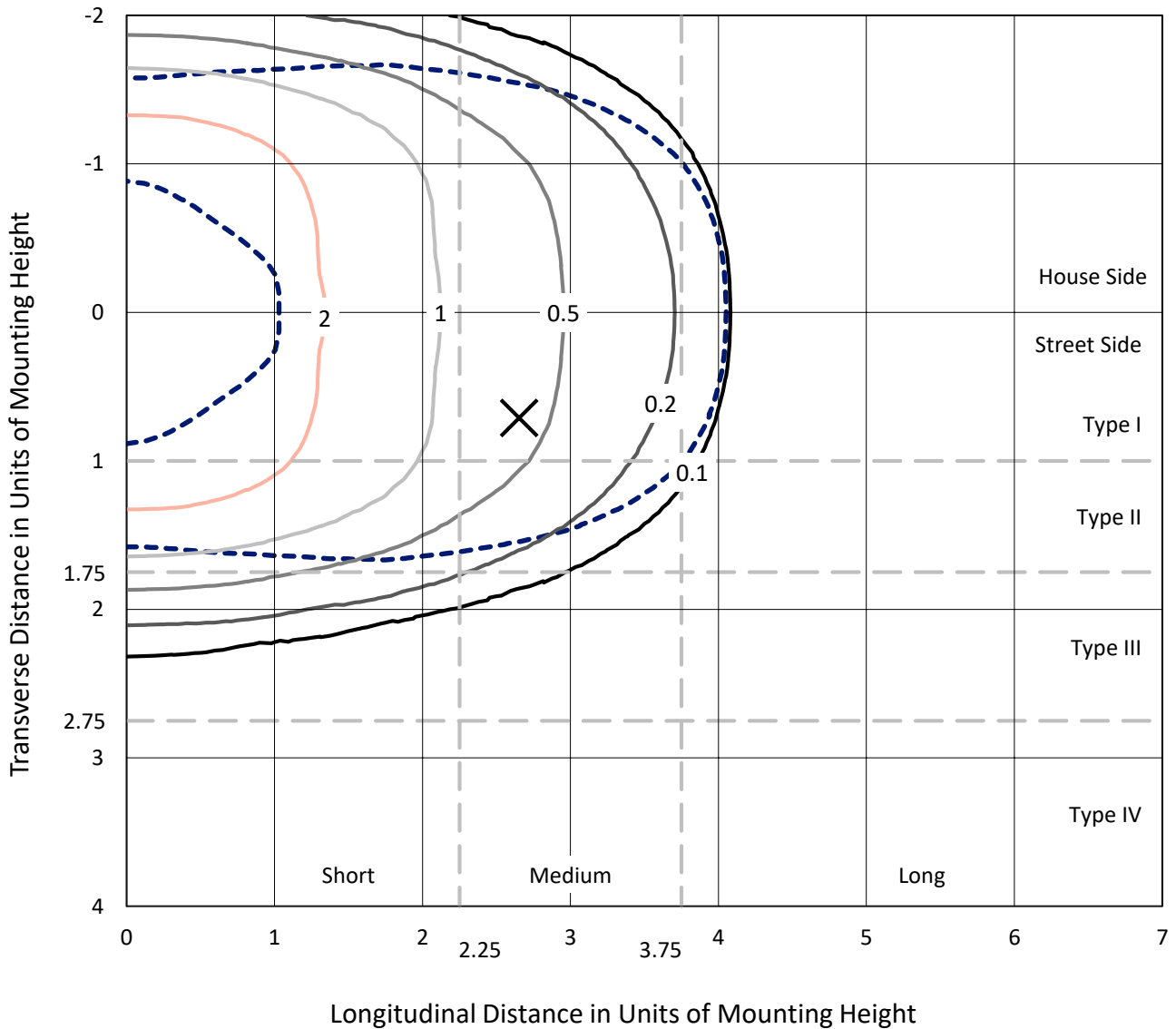


REPORT NUMBER: P270262

CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7027-600

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

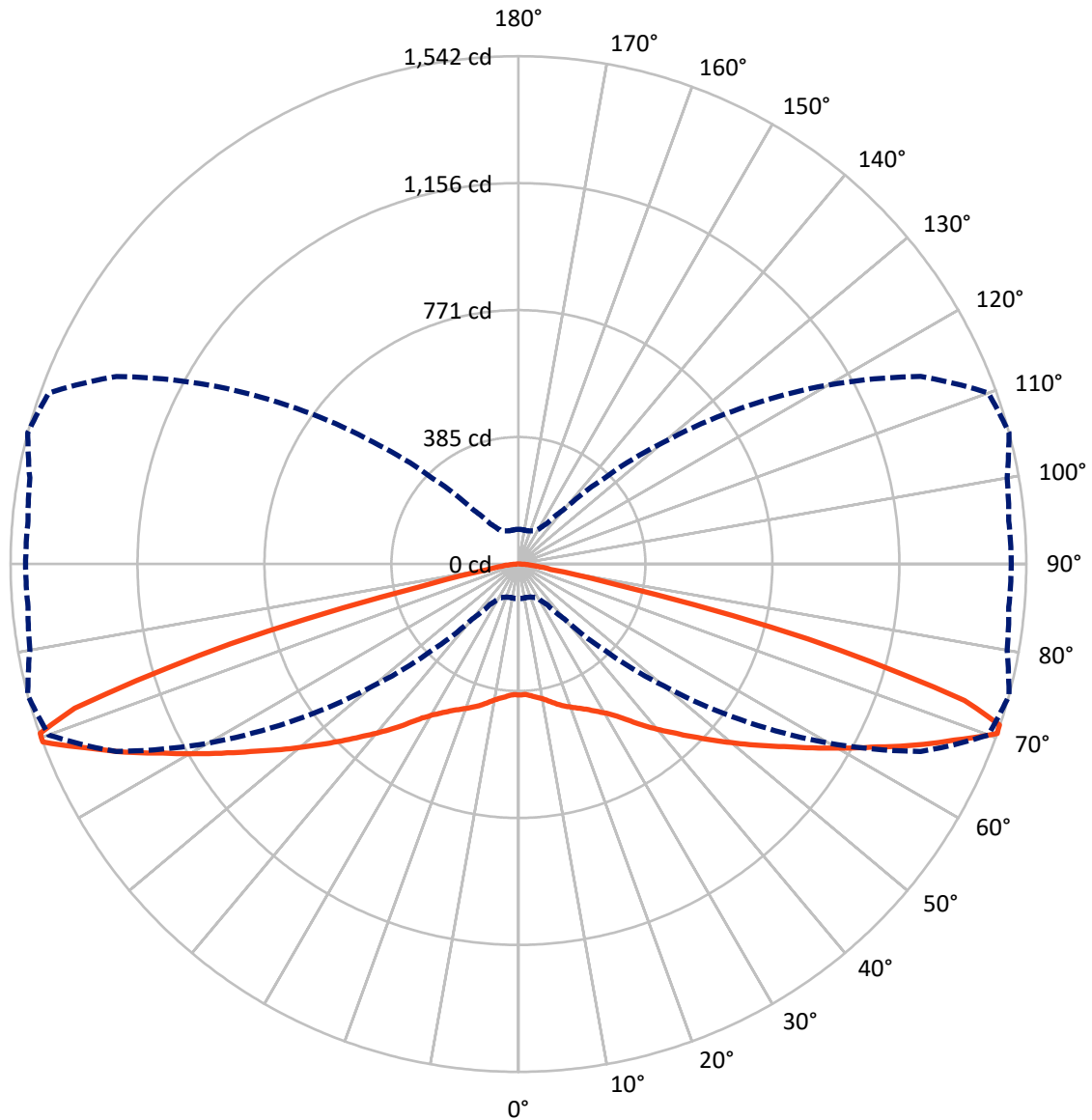


Based on 10 foot mounting height. Maximum calculated value = 4 fc
 Type II - Medium - Full Cutoff

REPORT NUMBER: P270262

CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7027-600

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P270262

CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7027-600

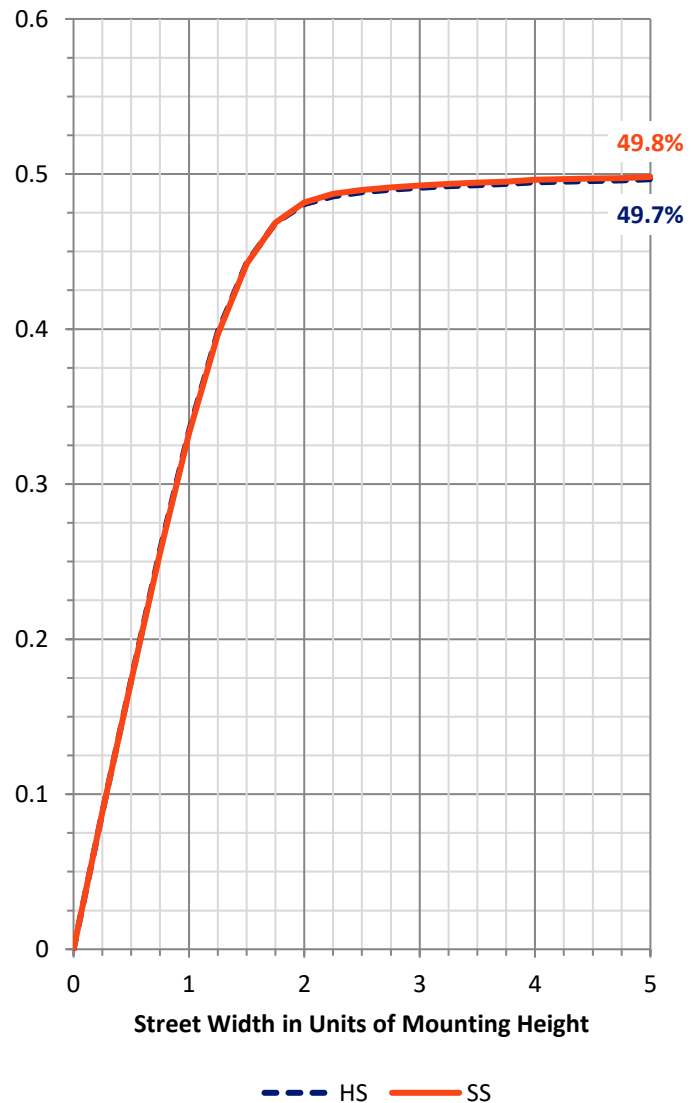
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1786.8	0.0	1786.8
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1786.8	0.0	1786.8
	% Fixture	50.0	0.0	50.0
Total	Lumens	3573.6	0.0	3573.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.2	1.1
10°-20°	118.4	3.3
20°-30°	222.3	6.2
30°-40°	391.7	11.0
40°-50°	649.1	18.2
50°-60°	903.0	25.3
60°-70°	852.4	23.9
70°-80°	364.1	10.2
80°-90°	34.4	1.0
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°	3573.6	100.0
0°-180°	3573.6	100.0

Coefficient of Utilization



REPORT NUMBER: P270262

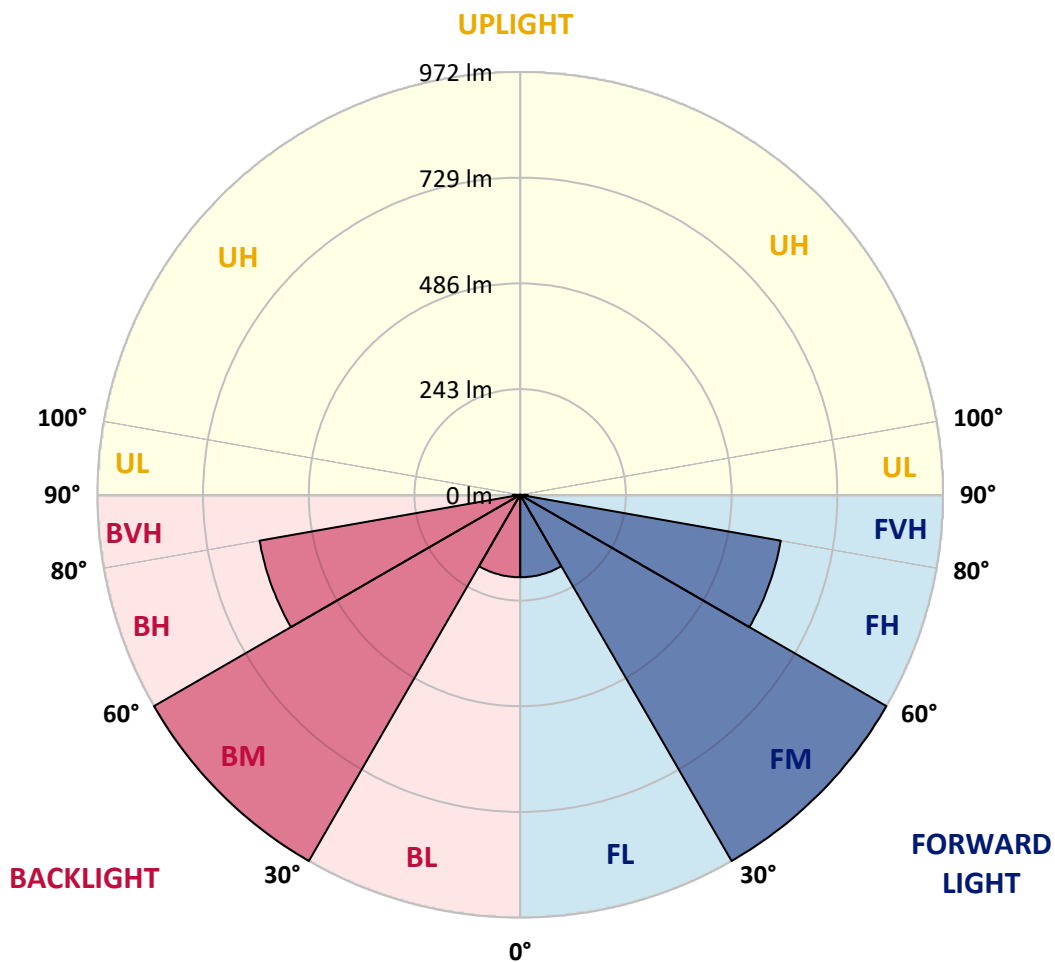
CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7027-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	189.4	5.3			
FM (30°-60°)	971.9	27.2			
FH (60°-80°)	608.3	17.0			G0/660
FVH (80°-90°)	17.2	0.5			G1/100
BL (0°-30°)	189.4	5.3	B1/500		
BM (30°-60°)	971.9	27.2	B1/1000		
BH (60°-80°)	608.3	17.0	B2/1000		G2/1000
BVH (80°-90°)	17.2	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Medium





REPORT NUMBER: P270262

CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7027-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	397.9	397.9	397.9	397.9	397.9	397.9	397.9	397.9	397.9	397.9	397.9
2.5°	400.5	400.1	400.5	399.7	399.9	399.7	399.7	398.8	398.8	398.4	397.7
5°	396.0	396.4	396.4	396.4	397.1	397.1	397.9	398.2	398.8	399.6	399.9
7.5°	388.5	388.7	389.4	389.9	391.2	393.0	394.9	396.8	398.6	400.9	403.2
10°	382.3	382.7	383.8	385.0	387.3	389.7	392.7	396.0	399.0	402.9	406.8
12.5°	378.9	379.7	381.4	383.1	387.0	389.9	394.1	399.0	403.2	406.9	411.2
15°	379.4	379.7	382.0	384.6	389.9	393.9	399.9	405.8	411.0	414.9	419.9
17.5°	385.8	386.4	388.7	392.4	397.5	402.7	409.2	415.1	422.2	426.9	432.7
20°	398.6	399.2	402.0	405.8	411.5	416.8	423.6	429.7	436.9	442.5	448.3
22.5°	415.1	416.4	419.1	423.9	429.5	436.0	443.0	449.4	456.2	461.8	466.7
25°	437.4	438.7	441.8	446.5	452.1	459.2	466.3	473.0	480.0	484.1	488.1
27.5°	467.2	469.4	472.8	476.6	481.5	488.9	495.5	501.2	507.9	512.7	515.3
30°	507.3	510.3	513.0	517.1	520.7	528.6	534.0	538.4	543.6	546.2	546.9
32.5°	556.3	559.1	561.9	564.8	569.7	576.9	582.0	584.4	587.2	586.8	584.3
35°	611.6	613.8	615.3	620.5	628.6	633.3	637.1	638.1	638.4	633.8	629.1
37.5°	669.9	672.6	673.9	682.0	689.4	694.8	696.6	698.7	697.4	689.4	681.0
40°	732.7	735.6	739.8	746.6	755.7	760.8	763.0	762.8	761.7	752.5	738.5
42.5°	794.6	798.1	801.5	813.5	821.1	829.8	830.8	830.7	828.1	817.6	801.5
45°	846.9	851.2	858.2	871.5	883.5	894.1	898.2	899.8	897.3	886.2	867.9
47.5°	890.2	893.0	901.8	918.2	933.3	948.9	957.4	963.4	963.3	955.2	935.7
50°	919.8	923.1	933.9	952.3	971.2	989.5	1006.2	1019.8	1026.4	1020.6	1002.4
52.5°	928.3	932.5	946.6	968.6	990.7	1015.2	1040.2	1064.4	1079.0	1082.5	1068.4
55°	892.5	897.1	917.7	948.3	984.7	1020.7	1058.8	1093.2	1123.3	1137.3	1131.7
57.5°	788.1	791.4	817.6	857.1	909.3	972.5	1036.6	1099.9	1151.3	1187.4	1193.7
60°	623.2	627.5	656.1	697.9	757.1	837.3	927.0	1030.4	1131.3	1214.0	1255.0
62.5°	420.5	423.6	450.9	489.0	554.1	631.2	731.2	862.3	1006.2	1153.8	1269.3
65°	220.9	220.9	239.4	266.1	317.8	387.0	489.3	623.8	795.0	979.3	1172.6
67.5°	128.1	127.9	132.1	138.2	154.5	182.5	238.9	337.8	499.8	714.4	934.2
70°	105.7	105.0	104.4	104.4	106.8	111.1	121.8	148.8	217.8	368.3	574.8
71°	101.0	100.5	98.8	98.1	99.3	101.5	106.2	118.7	154.8	251.3	429.3
72.5°	95.4	94.3	91.5	90.5	90.6	91.5	93.0	97.8	108.9	142.9	244.8
75°	86.9	84.3	80.8	79.3	78.6	78.4	78.4	79.7	82.1	86.1	100.3
77.5°	77.1	73.2	69.7	68.1	67.0	66.3	65.8	64.9	64.5	66.3	71.4
80°	65.1	61.2	58.2	57.3	56.7	55.3	53.4	51.7	50.7	51.6	54.6
82.5°	50.3	46.4	46.8	47.0	46.0	43.7	42.0	39.9	37.9	37.4	38.9
85°	40.1	38.1	36.7	39.6	37.2	34.5	32.0	28.7	24.0	19.8	21.5
87.5°	17.2	17.4	25.2	37.9	33.1	26.7	22.2	18.0	11.4	8.5	8.8
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: P270262

CATALOG NUMBER: NAV-AF-01-D-UNV-RW-7027-600

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	397.9	397.9	397.9	397.9	397.9	397.9	397.9	397.9
2.5°	397.5	397.5	396.8	396.4	396.4	396.4	396.0	396.2
5°	400.1	400.6	401.2	400.9	401.5	402.3	402.0	401.7
7.5°	404.6	406.0	407.3	408.0	408.9	409.8	410.0	409.4
10°	409.2	411.9	413.8	415.6	416.8	417.6	418.3	418.2
12.5°	414.7	418.6	422.2	425.7	428.2	429.5	430.8	430.4
15°	423.9	428.2	432.7	437.4	441.2	443.3	445.2	444.8
17.5°	436.4	440.3	443.9	448.6	453.3	455.5	457.7	457.5
20°	452.1	455.0	457.1	459.8	464.2	466.7	468.7	468.0
22.5°	470.1	470.9	471.3	472.1	475.7	478.5	481.2	481.9
25°	489.5	488.9	487.5	486.8	489.3	492.5	495.9	496.8
27.5°	513.7	511.5	508.1	505.4	506.1	510.1	514.0	514.9
30°	544.3	539.1	531.8	526.8	525.8	530.1	534.1	535.5
32.5°	578.9	572.0	562.1	554.3	550.9	554.8	558.2	560.4
35°	620.1	612.5	600.6	590.5	585.2	587.6	593.9	596.1
37.5°	668.9	658.4	645.3	632.4	623.5	624.0	630.6	633.3
40°	722.9	707.7	690.8	674.9	662.1	661.2	667.1	669.1
42.5°	779.1	759.6	739.9	719.2	703.0	700.0	708.0	708.1
45°	839.6	814.6	790.1	765.9	749.0	743.9	751.5	752.5
47.5°	904.1	872.8	843.9	817.6	799.5	791.4	798.9	800.2
50°	971.2	938.8	905.2	876.0	854.7	844.9	853.7	854.6
52.5°	1037.7	1007.1	973.8	940.3	914.7	903.3	913.7	916.8
55°	1104.7	1075.2	1043.8	1010.5	978.0	968.2	979.3	982.7
57.5°	1174.4	1146.0	1117.5	1084.0	1052.4	1037.4	1049.4	1054.2
60°	1251.2	1226.0	1199.2	1165.5	1134.3	1116.9	1127.2	1132.6
62.5°	1326.6	1321.4	1297.2	1261.8	1222.6	1205.0	1213.8	1217.7
65°	1332.9	1416.4	1415.3	1380.3	1325.3	1296.0	1298.4	1300.2
67.5°	1163.5	1355.2	1477.6	1488.6	1427.1	1381.4	1375.9	1377.0
70°	823.7	1086.8	1346.7	1517.4	1541.6	1506.1	1494.4	1496.1
71°	660.0	932.5	1218.7	1448.2	1539.9	1529.5	1523.0	1527.7
72.5°	421.2	687.1	965.7	1240.2	1416.0	1466.5	1473.8	1476.8
75°	152.9	295.6	500.3	716.8	908.5	1040.4	1113.0	1118.7
77.5°	82.1	105.9	163.8	244.6	307.3	340.8	344.9	346.4
80°	60.5	70.1	80.2	91.5	98.8	100.2	97.6	92.4
82.5°	42.8	48.4	52.5	56.5	59.4	57.0	47.3	36.0
85°	24.9	27.3	29.6	31.6	32.0	30.3	19.9	16.3
87.5°	9.8	10.8	10.5	11.9	11.4	10.5	7.8	6.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)