

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: McGRAW-EDISON

Report Number: P299455

Luminaire Tested: **GLNA-AF-01-LED-E1-5NQ-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299455
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-01-LED-E1-5NQ-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3666.9 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B2 - U0 - G1

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

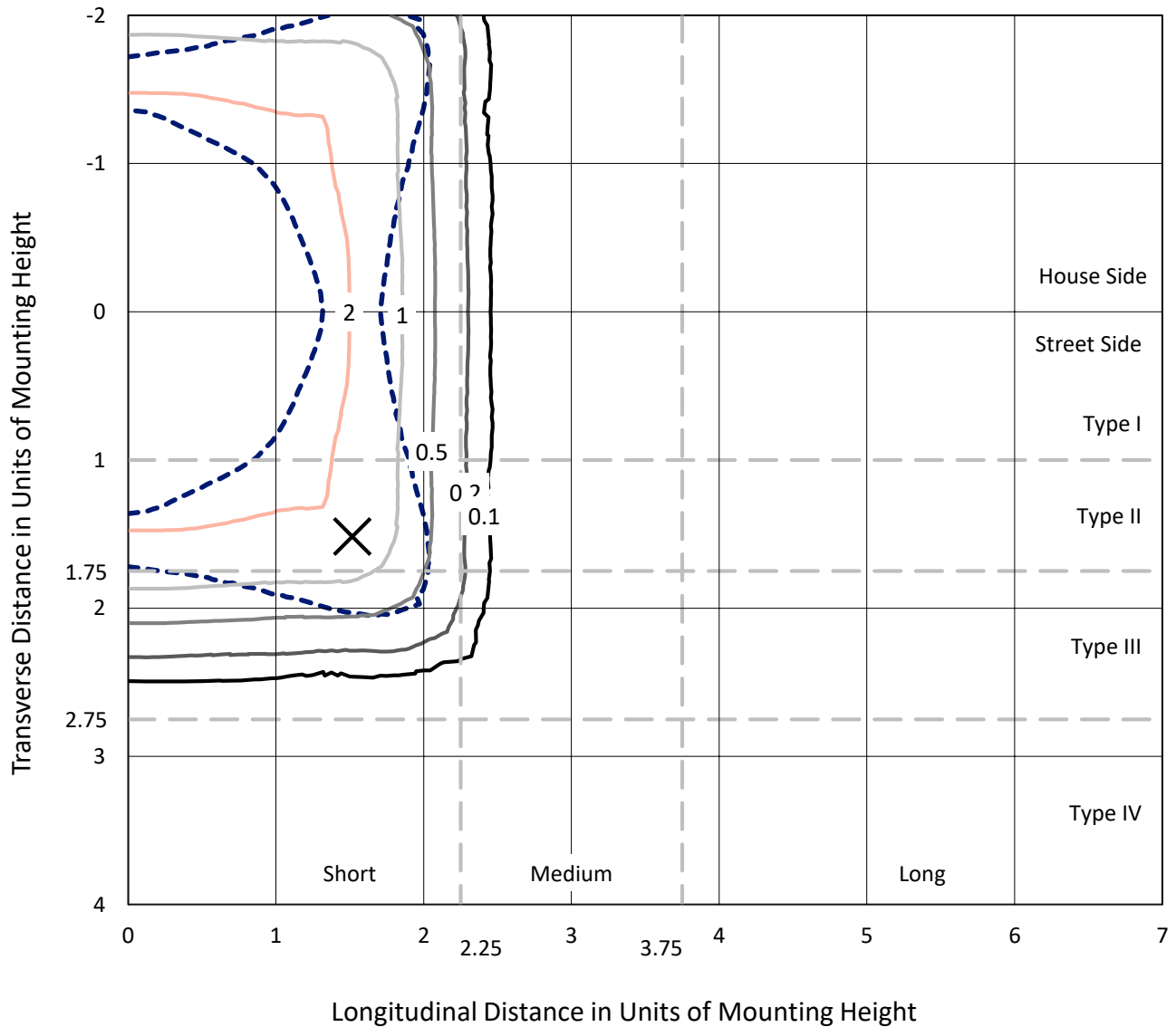


REPORT NUMBER: P299455

CATALOG NUMBER: GLNA-AF-01-LED-E1-5NQ-7027-600

Iso-Footcandle Lines of Horizontal Illumination

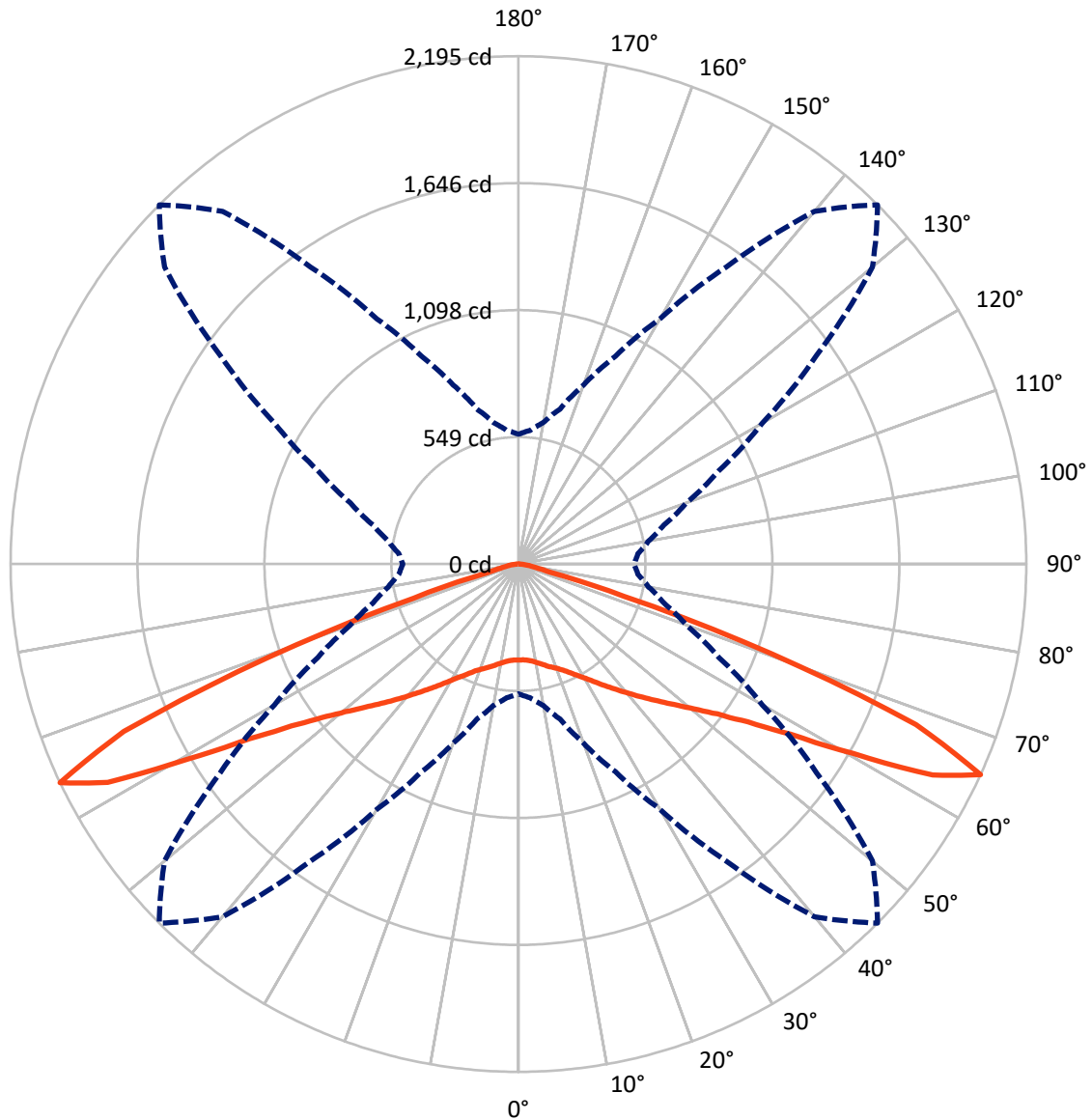
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.2 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P299455
CATALOG NUMBER: GLNA-AF-01-LED-E1-5NQ-7027-600

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P299455

CATALOG NUMBER: GLNA-AF-01-LED-E1-5NQ-7027-600

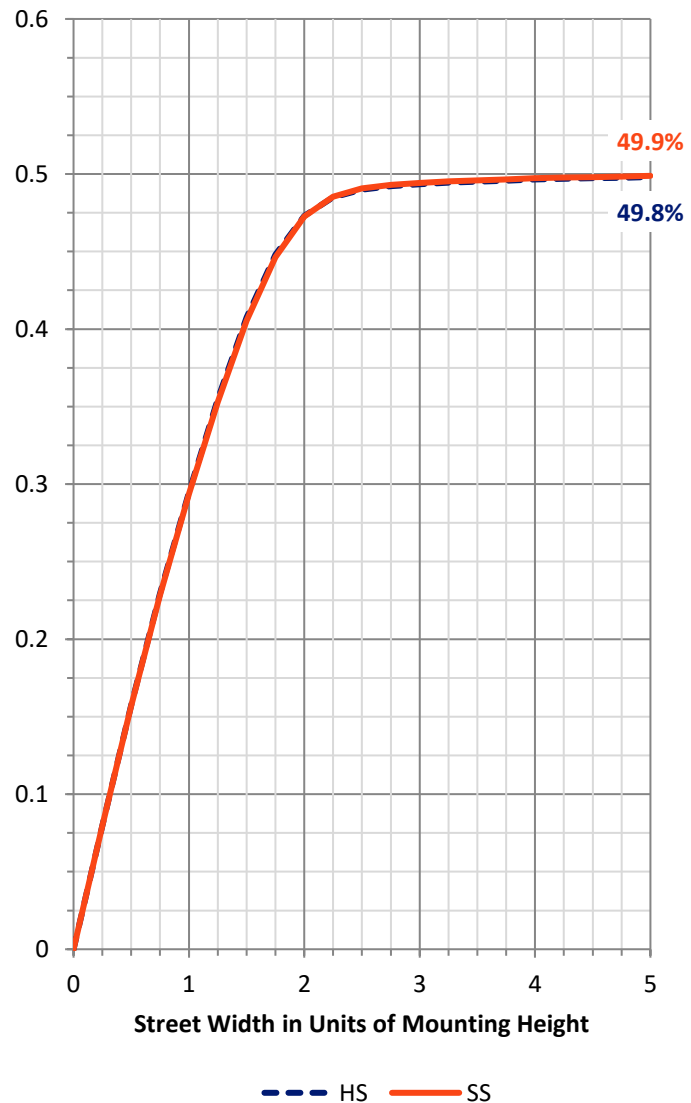
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1833.5	0.0	1833.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	1833.5	0.0	1833.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	3666.9	0.0	3666.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.4	1.1
10°-20°	129.7	3.5
20°-30°	242.5	6.6
30°-40°	410.2	11.2
40°-50°	670.7	18.3
50°-60°	1066.5	29.1
60°-70°	964.0	26.3
70°-80°	122.0	3.3
80°-90°	21.0	0.6
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°	3666.9	100.0
0°-180°	3666.9	100.0



REPORT NUMBER: P299455

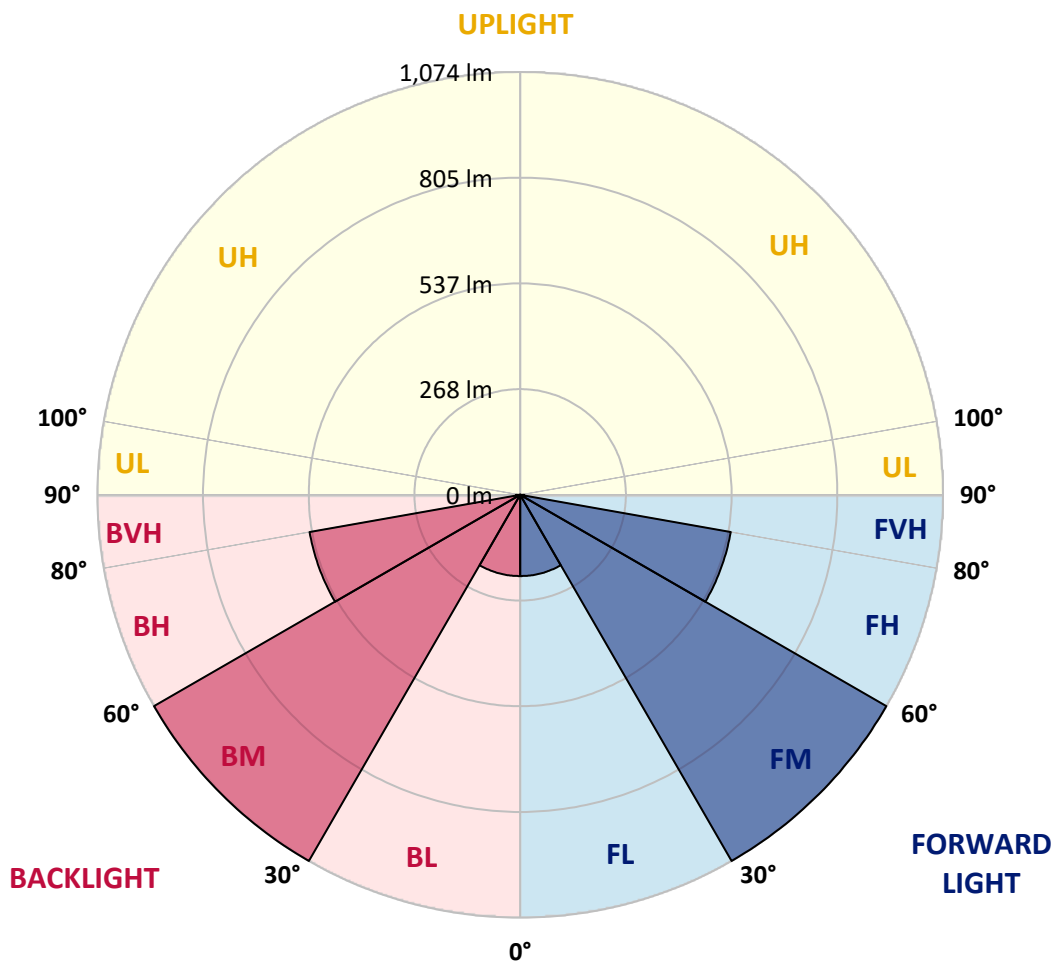
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	206.3	5.6			
FM (30°-60°)	1073.6	29.3			
FH (60°-80°)	543.0	14.8			G0/660
FVH (80°-90°)	10.5	0.3			G1/100
BL (0°-30°)	206.3	5.6	B1/500		
BM (30°-60°)	1073.6	29.3	B2/2500		
BH (60°-80°)	543.0	14.8	B2/1000		G0/660
BVH (80°-90°)	10.5	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type V Short





REPORT NUMBER: P299455

CATALOG NUMBER: GLNA-AF-01-LED-E1-5NQ-7027-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9
2.5°	415.3	415.6	415.9	415.6	415.9	415.4	415.1	415.6	415.1	414.6	414.9
5°	418.9	419.0	419.0	418.5	419.0	418.7	418.2	418.9	418.4	417.8	418.2
7.5°	424.9	425.6	425.0	424.5	424.9	424.5	424.2	424.4	424.2	423.7	423.8
10°	432.9	433.5	433.1	432.9	433.3	433.1	432.8	432.6	432.8	432.3	432.3
12.5°	442.7	442.6	442.4	442.6	443.1	443.1	442.9	443.1	443.4	443.6	443.3
15°	452.4	452.7	452.7	452.7	453.7	454.6	455.1	455.4	456.1	456.3	455.6
17.5°	464.4	464.4	464.2	464.4	465.4	466.8	467.3	468.0	468.7	469.2	468.3
20°	477.8	478.1	478.1	478.5	479.8	481.4	481.4	481.7	481.4	481.7	481.2
22.5°	494.1	495.1	495.1	495.3	496.7	498.6	498.0	498.6	497.7	498.4	497.7
25°	515.4	516.9	516.6	516.6	517.6	518.8	519.0	520.0	519.8	520.7	520.2
27.5°	539.4	541.8	542.5	542.3	543.0	544.2	544.6	545.8	545.1	545.8	545.4
30°	568.3	569.3	570.7	571.2	572.1	573.3	573.3	573.4	572.6	573.6	574.1
32.5°	598.2	600.0	601.4	604.5	606.1	606.9	606.7	607.1	606.2	607.6	608.6
35°	637.7	639.0	641.3	643.7	645.7	645.6	645.0	645.2	645.2	646.4	647.4
37.5°	685.2	685.6	688.5	691.9	693.0	691.9	688.8	688.1	686.6	688.1	689.9
40°	735.5	736.7	742.6	744.8	745.3	743.4	739.0	736.4	733.0	734.9	737.3
42.5°	788.3	790.7	796.0	799.9	801.7	800.5	794.3	790.3	785.9	786.9	789.3
45°	846.7	849.6	857.1	860.9	864.2	862.3	856.3	850.3	843.2	843.7	847.5
47.5°	911.9	914.8	924.6	931.0	932.7	932.4	925.7	917.4	907.8	907.5	910.7
50°	985.1	988.0	1000.2	1010.0	1015.0	1014.4	1006.5	994.9	983.2	983.4	987.5
52.5°	1056.5	1060.1	1072.8	1089.7	1099.5	1106.5	1101.7	1090.7	1076.4	1076.8	1080.6
55°	1123.5	1129.5	1144.1	1166.9	1185.2	1204.9	1210.6	1210.2	1201.6	1204.0	1207.8
57.5°	1156.0	1164.9	1187.4	1223.5	1260.5	1300.7	1334.7	1360.2	1371.0	1387.3	1383.5
60°	1094.5	1108.7	1141.9	1194.9	1268.3	1352.1	1441.9	1529.7	1604.5	1661.0	1628.6
62.5°	896.1	914.7	954.9	1022.9	1133.8	1267.9	1439.8	1647.3	1873.3	2009.7	1912.3
65°	560.7	580.0	620.8	693.6	823.5	990.2	1223.5	1567.3	1989.6	2195.1	1997.0
67.5°	218.6	229.1	251.3	297.8	395.3	543.7	777.8	1168.0	1673.1	1853.2	1642.0
70°	109.6	110.6	114.7	123.3	144.3	187.4	285.1	541.5	959.5	1158.9	925.0
72.5°	79.2	79.3	81.4	85.2	91.9	101.5	120.0	165.7	312.0	476.9	292.5
75°	60.6	61.3	62.5	64.6	68.2	73.0	79.7	95.5	118.3	137.2	115.4
77.5°	46.7	48.1	48.9	50.8	53.1	56.3	58.2	64.2	74.7	78.7	77.5
80°	35.5	36.8	38.6	40.2	41.7	43.3	42.6	45.3	50.8	54.1	52.4
82.5°	22.7	24.0	29.5	30.9	31.6	32.6	31.4	31.6	34.0	36.1	34.0
85°	14.6	15.5	18.7	20.4	20.6	21.3	20.8	19.6	19.6	17.9	20.1
87.5°	6.7	6.9	8.4	10.0	10.3	9.3	9.1	8.8	7.0	6.7	7.2
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: P299455

CATALOG NUMBER: GLNA-AF-01-LED-E1-5NQ-7027-600

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	414.9	414.9	414.9	414.9	414.9	414.9	414.9	414.9
2.5°	414.7	415.1	415.3	415.8	415.9	415.9	416.1	416.5
5°	418.0	418.5	418.7	419.4	419.6	419.4	419.7	419.9
7.5°	423.8	424.7	425.0	425.7	425.2	425.9	426.1	426.1
10°	432.4	433.3	433.5	434.1	433.8	434.1	434.1	433.8
12.5°	443.8	443.9	443.4	443.9	443.3	443.6	443.1	442.7
15°	456.3	455.8	454.6	454.6	453.6	453.7	453.6	453.4
17.5°	468.5	467.5	466.6	466.3	465.4	465.2	464.7	464.7
20°	481.9	481.4	480.9	480.2	479.3	478.5	478.3	478.6
22.5°	498.0	497.9	497.9	497.5	496.3	495.5	494.9	494.9
25°	519.7	518.1	518.1	518.0	517.4	516.9	515.9	516.4
27.5°	544.1	543.2	543.9	543.7	543.2	543.2	542.5	542.5
30°	574.1	573.8	574.8	573.9	572.2	572.1	571.4	570.5
32.5°	608.8	608.5	610.0	609.0	606.2	604.7	603.3	602.6
35°	647.4	647.6	649.5	648.8	645.7	644.7	642.3	642.0
37.5°	689.7	692.4	695.7	696.4	693.8	693.1	690.6	689.2
40°	739.3	742.9	747.9	749.1	746.4	745.9	742.2	740.4
42.5°	792.2	798.4	804.6	805.6	802.9	800.1	796.7	795.3
45°	851.3	858.7	866.8	868.8	864.7	861.4	857.0	857.0
47.5°	917.6	926.9	936.0	941.6	937.9	934.4	929.1	925.7
50°	995.9	1008.6	1020.5	1026.3	1020.3	1013.8	1004.5	1001.4
52.5°	1094.1	1107.9	1118.2	1115.1	1105.8	1096.7	1086.6	1082.5
55°	1219.5	1224.1	1224.1	1212.5	1193.9	1178.6	1162.7	1157.3
57.5°	1376.3	1358.4	1331.0	1296.1	1252.3	1214.2	1188.4	1176.2
60°	1560.6	1474.7	1377.7	1282.4	1204.0	1139.5	1101.2	1083.7
62.5°	1683.4	1458.7	1264.3	1111.3	998.6	920.9	868.0	847.3
65°	1573.3	1216.6	956.2	773.2	650.4	571.2	518.8	499.6
67.5°	1152.4	762.3	509.2	364.9	267.4	213.3	191.8	182.9
70°	517.3	268.4	164.5	128.5	110.8	101.7	97.7	96.3
72.5°	155.9	112.8	95.1	85.9	78.8	74.4	71.1	70.8
75°	94.1	78.3	69.6	64.1	59.6	56.0	54.3	53.8
77.5°	65.8	57.5	53.4	49.5	46.0	43.3	41.7	40.5
80°	46.2	42.2	40.4	38.1	35.9	33.3	31.1	30.1
82.5°	30.9	30.1	30.1	28.7	26.8	24.4	19.9	18.9
85°	19.9	19.7	20.1	19.6	18.2	15.6	12.9	12.2
87.5°	9.3	9.4	10.5	10.3	10.0	8.2	6.5	6.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)