

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: P301920

Luminaire Tested: **GLNA-AF-01-LED-E1-SL4-7027-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301920
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
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-SL4-7027-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2630.5 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

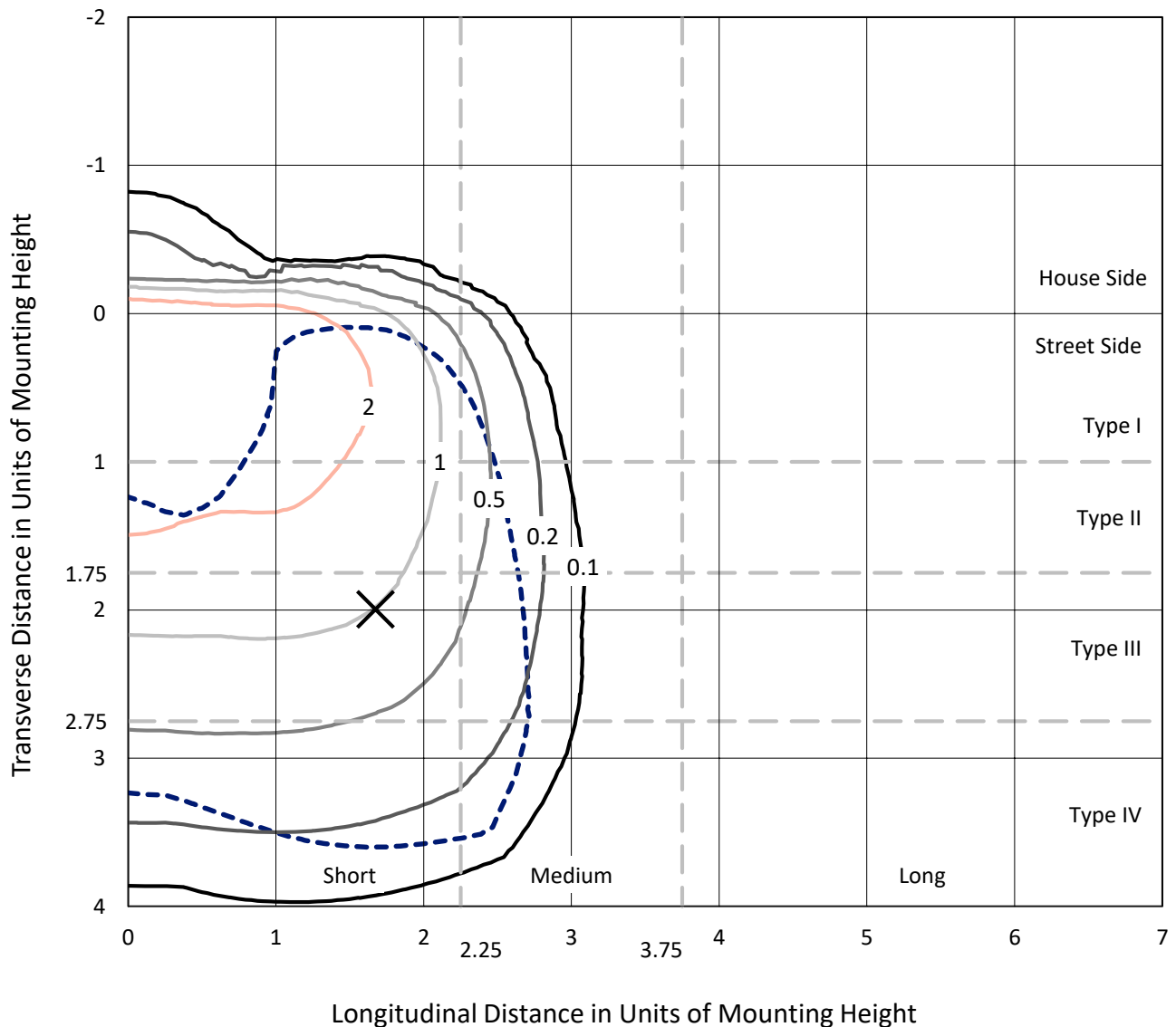
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P301920
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

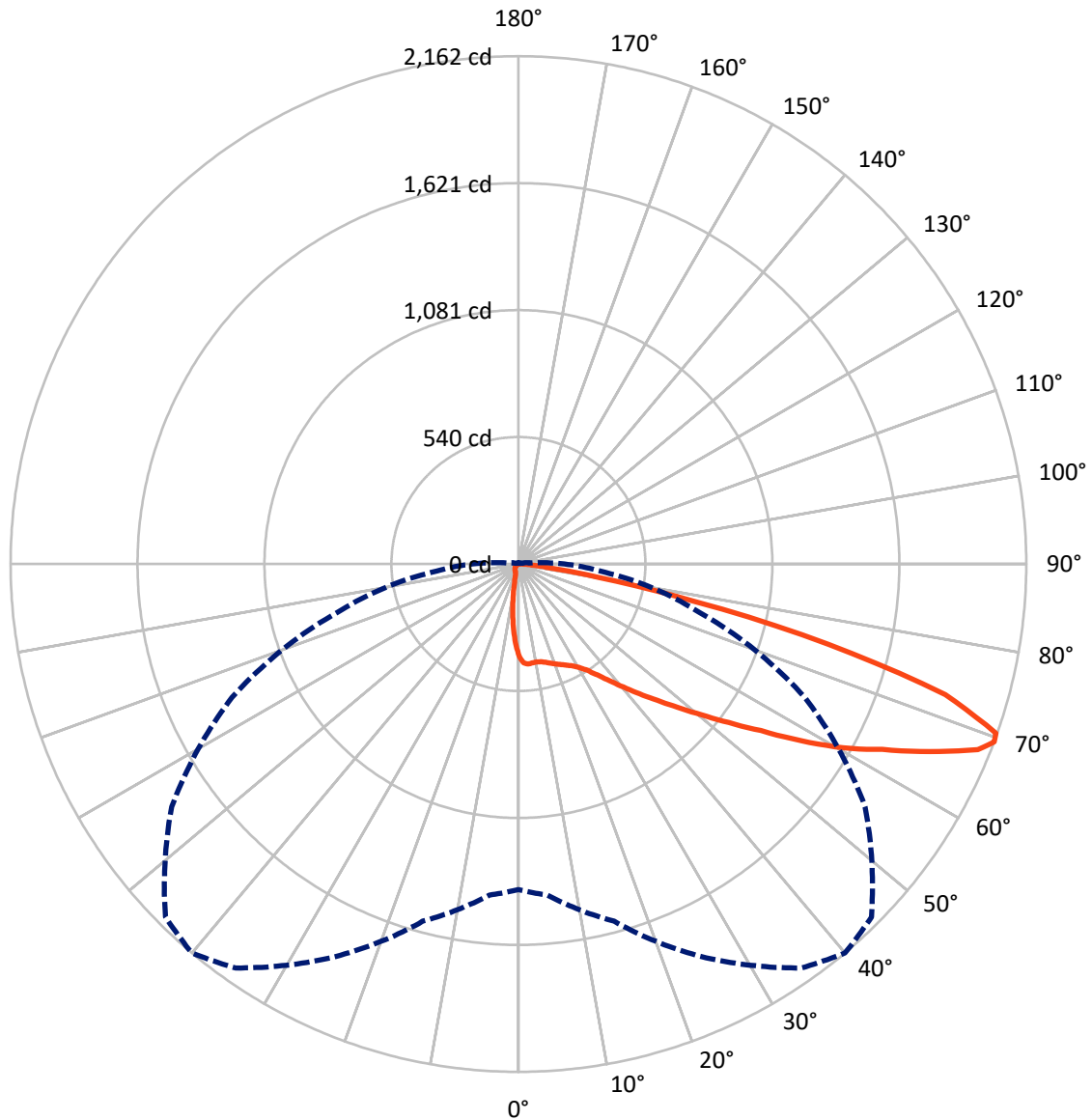


Based on 10 foot mounting height. Maximum calculated value = 4.3 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P301920

CATALOG NUMBER: GLNA-AF-01-LED-E1-SL4-7027-600-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P301920

CATALOG NUMBER: GLNA-AF-01-LED-E1-SL4-7027-600-HSS

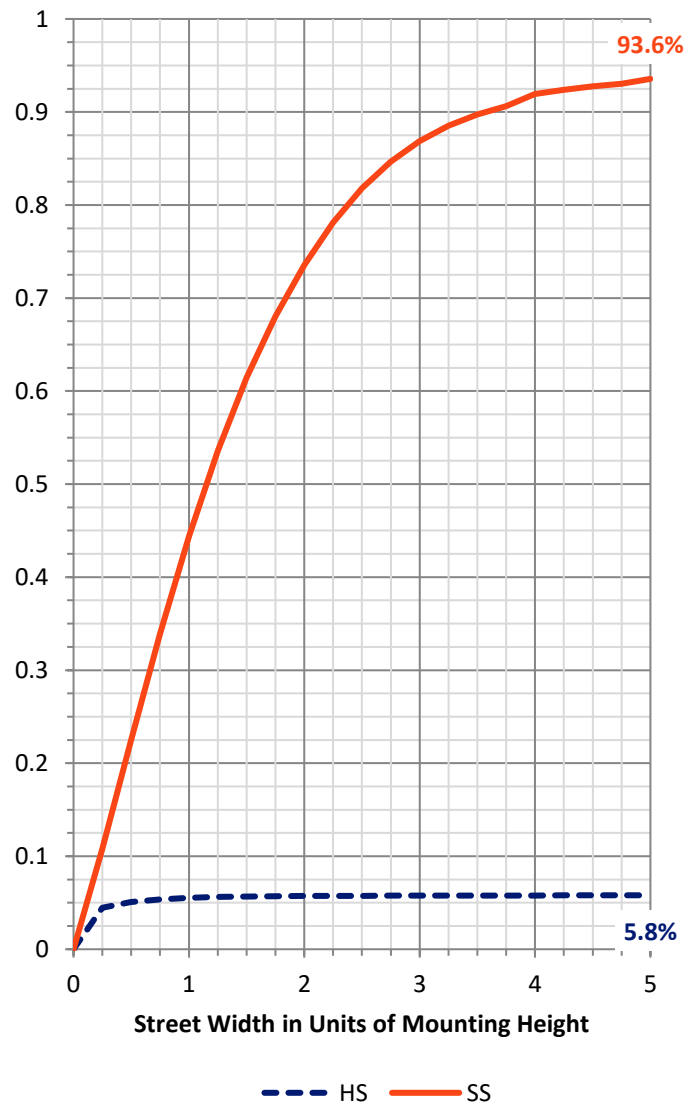
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	153.9	0.0	153.9
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	2476.6	0.0	2476.6
	% Fixture	94.1	0.0	94.1
Total	Lumens	2630.5	0.0	2630.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.9	1.2
10°-20°	78.4	3.0
20°-30°	132.0	5.0
30°-40°	216.1	8.2
40°-50°	374.1	14.2
50°-60°	589.3	22.4
60°-70°	769.6	29.3
70°-80°	396.4	15.1
80°-90°	42.9	1.6
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°	2630.5	100.0
0°-180°	2630.5	100.0



REPORT NUMBER: P301920

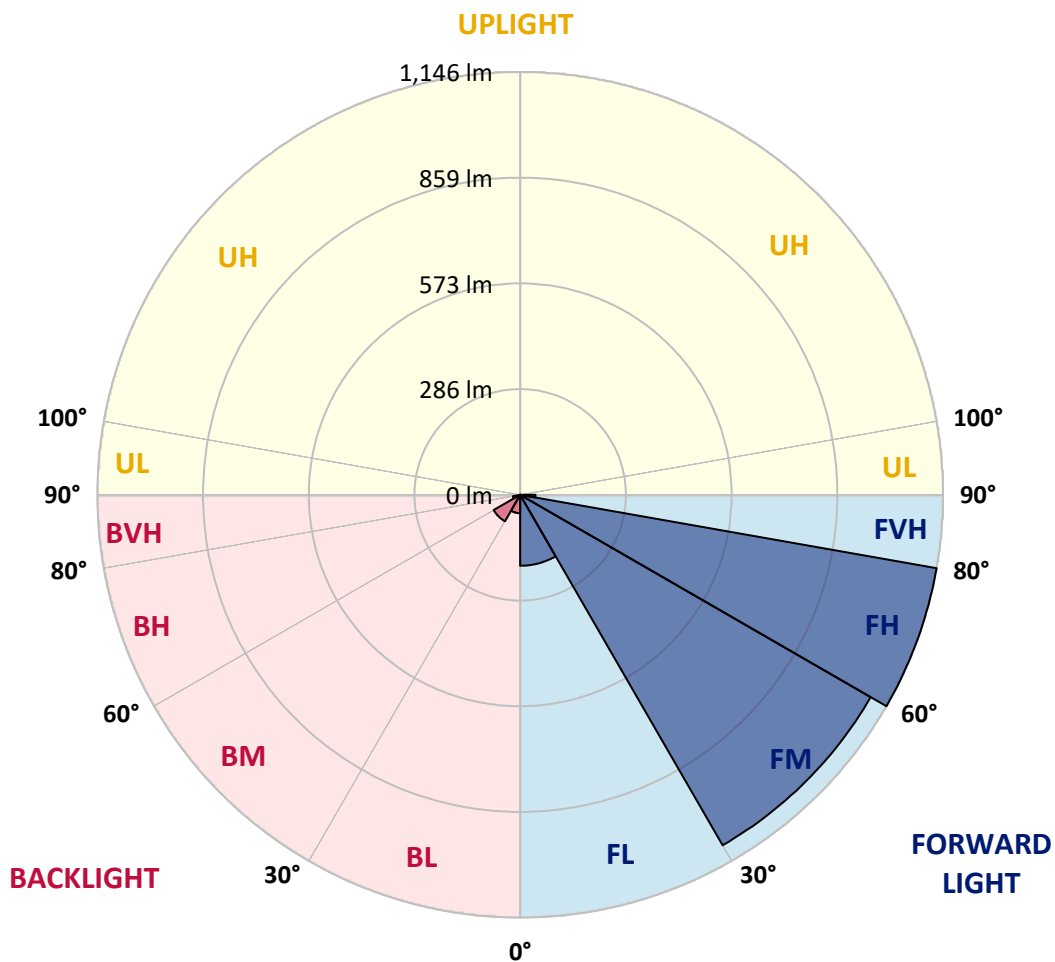
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	192.4	7.3			
FM	(30°-60°)	1096.8	41.7			
FH	(60°-80°)	1145.9	43.6			G1/1800
FVH	(80°-90°)	41.5	1.6			G1/100
BL	(0°-30°)	49.9	1.9	B0/110		
BM	(30°-60°)	82.7	3.1	B0/220		
BH	(60°-80°)	20.0	0.8	B0/110		G0/110
BVH	(80°-90°)	1.3	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Short





REPORT NUMBER: P301920

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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	393.0	393.0	393.0	393.0	393.0	393.0	393.0	393.0	393.0	393.0	393.0
2.5°	431.5	429.2	427.8	425.9	423.5	421.5	420.7	414.9	409.4	401.9	393.3
5°	439.5	438.7	436.2	433.7	430.9	427.8	426.0	419.2	411.3	400.4	385.3
7.5°	440.3	439.4	436.2	432.8	428.9	425.1	422.1	415.2	408.0	396.9	378.6
10°	439.0	437.9	435.6	431.8	427.0	423.4	420.4	413.8	407.7	397.7	377.4
12.5°	437.6	436.5	435.4	433.6	429.3	426.8	424.3	418.1	412.6	404.1	381.9
15°	439.0	438.4	439.7	438.9	436.5	434.3	431.8	426.2	421.2	414.1	390.2
17.5°	445.0	445.0	448.9	449.4	447.2	444.1	440.5	434.8	430.6	424.6	400.1
20°	458.9	458.5	463.5	464.4	459.1	454.2	448.9	442.0	438.7	435.0	409.8
22.5°	482.9	480.7	483.7	482.7	472.2	464.7	458.1	449.7	448.0	446.2	420.6
25°	514.0	512.8	514.8	505.6	487.1	476.9	469.1	459.6	459.6	461.3	432.8
27.5°	559.3	554.6	547.7	531.4	503.7	490.7	482.3	472.1	474.7	481.2	448.9
30°	605.6	600.5	584.7	559.6	523.9	510.3	500.4	489.8	496.0	507.8	470.5
32.5°	651.4	645.6	623.2	591.5	552.9	539.3	529.7	518.0	528.4	548.2	502.1
35°	695.7	690.5	664.7	627.4	591.4	580.1	571.4	561.2	574.6	602.2	546.8
37.5°	745.5	739.8	708.4	668.0	638.2	630.1	623.6	613.5	637.0	677.4	608.9
40°	806.7	797.1	754.7	714.5	692.4	688.5	684.1	682.7	719.2	775.1	691.8
42.5°	876.8	861.2	803.2	763.5	751.9	754.7	753.6	759.9	822.0	896.6	792.6
45°	947.0	926.8	857.3	815.8	817.3	827.2	833.3	858.4	950.9	1035.9	901.1
47.5°	1006.5	986.6	909.1	872.3	891.1	910.5	927.1	974.5	1083.4	1173.1	985.5
50°	1057.4	1038.6	964.0	934.5	976.7	1008.0	1035.0	1105.3	1225.8	1277.5	1044.7
52.5°	1099.0	1086.5	1021.0	1005.7	1074.6	1120.5	1159.9	1244.2	1352.0	1362.4	1090.7
55°	1139.6	1130.6	1082.3	1090.4	1189.5	1252.0	1301.9	1391.5	1460.7	1433.2	1134.9
57.5°	1186.2	1178.1	1152.1	1197.8	1340.6	1419.2	1473.7	1522.1	1556.4	1505.5	1176.5
60°	1233.8	1229.1	1229.8	1317.1	1514.1	1589.6	1619.6	1632.2	1650.3	1573.6	1178.9
62.5°	1279.2	1288.2	1318.5	1449.9	1680.2	1738.2	1753.4	1765.7	1744.4	1584.4	1089.2
65°	1356.1	1370.7	1443.2	1627.6	1863.0	1925.0	1940.6	1898.2	1759.3	1444.7	885.9
67.5°	1393.7	1420.3	1549.6	1793.3	2040.2	2109.1	2103.3	1906.8	1578.8	1101.7	568.5
69°	1385.9	1414.2	1574.2	1844.0	2099.1	2161.6	2124.8	1801.4	1345.0	798.1	349.0
70°	1354.9	1383.5	1561.5	1842.1	2106.6	2156.1	2085.0	1671.3	1137.2	583.6	218.3
72.5°	1131.4	1156.2	1386.3	1665.0	1940.6	1900.4	1744.3	1157.9	554.1	158.9	49.2
75°	696.5	710.2	994.7	1254.3	1465.7	1362.4	1162.1	576.0	165.2	44.9	27.2
77.5°	368.0	374.2	544.6	739.4	929.1	768.8	595.6	224.7	76.1	28.2	19.7
80°	217.5	222.2	293.3	338.1	402.1	335.9	238.2	137.9	54.5	17.7	17.5
82.5°	124.5	127.5	212.6	187.9	158.5	135.3	118.5	130.7	32.7	11.9	18.2
85°	45.7	46.3	119.6	143.0	94.3	56.1	58.9	108.4	8.8	7.5	14.2
87.5°	21.3	20.8	61.5	87.5	55.1	35.5	45.9	23.8	3.4	4.9	3.9
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: P301920

CATALOG NUMBER: GLNA-AF-01-LED-E1-SL4-7027-600-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	393.0	393.0	393.0	393.0	393.0	393.0	393.0	393.0	393.0	393.0	393.0
2.5°	388.3	382.5	372.0	361.2	350.3	341.8	333.5	326.9	324.7	320.7	321.0
5°	376.4	365.8	343.8	321.6	298.4	279.3	261.3	246.8	239.7	232.5	232.5
7.5°	366.1	350.6	316.3	280.1	242.7	211.2	182.9	161.6	149.8	140.4	140.3
10°	362.2	341.2	293.3	241.4	189.3	146.4	112.7	91.1	80.0	72.8	72.5
12.5°	363.9	337.9	275.6	205.7	140.3	94.1	65.3	51.4	46.7	44.5	44.5
15°	368.9	337.0	257.9	170.8	99.1	58.9	43.4	39.6	39.3	39.3	39.3
17.5°	375.0	337.3	239.7	136.8	67.5	42.1	37.4	37.0	37.3	37.3	37.3
20°	381.3	337.4	220.1	105.4	47.6	36.6	35.2	35.1	35.4	35.4	35.5
22.5°	388.9	338.2	200.6	78.8	39.3	34.6	33.5	33.5	33.7	33.7	33.5
25°	397.7	339.8	180.2	58.4	35.9	33.2	32.3	32.1	32.3	32.1	31.9
27.5°	408.7	342.0	157.5	45.7	34.3	31.8	31.0	31.0	30.8	30.7	30.5
30°	422.4	344.5	132.0	38.8	32.7	30.5	29.7	29.6	29.4	29.1	29.1
32.5°	443.4	350.0	106.8	35.2	31.0	28.8	28.2	28.2	27.9	27.6	27.4
35°	475.7	360.8	84.2	33.0	29.1	26.9	26.1	26.1	25.8	25.7	25.5
37.5°	520.3	377.2	65.4	31.0	27.2	24.9	24.1	24.0	23.6	23.3	23.2
40°	579.6	397.5	51.5	29.1	25.4	22.9	22.2	21.9	21.3	20.8	20.8
42.5°	654.2	420.7	41.8	27.1	23.2	21.0	20.5	20.0	18.9	18.5	18.3
45°	732.2	441.5	35.4	24.7	21.0	19.1	18.8	18.0	16.6	16.1	16.1
47.5°	788.4	446.4	31.2	22.5	18.9	17.1	16.9	15.5	14.2	13.9	13.8
50°	823.4	436.9	27.7	20.4	17.1	15.2	14.7	13.0	12.2	11.9	11.7
52.5°	847.1	419.8	24.9	18.5	15.3	13.5	12.4	11.1	10.5	10.2	10.2
55°	866.0	395.7	22.1	16.8	13.9	12.1	10.5	9.6	8.9	8.6	8.6
57.5°	871.4	362.9	19.3	15.3	12.5	10.6	8.9	8.3	7.5	7.4	7.4
60°	832.7	303.9	17.1	13.6	11.3	9.2	7.8	7.0	6.3	6.1	5.9
62.5°	730.7	235.2	15.0	12.1	9.9	8.0	6.7	5.8	5.2	5.2	5.2
65°	557.4	157.7	13.2	10.5	8.6	6.7	5.8	4.7	4.4	4.4	4.5
67.5°	333.7	85.8	11.3	8.9	7.4	5.6	4.9	4.1	3.9	4.1	4.1
69°	195.6	50.4	10.2	8.0	6.4	5.0	4.2	3.6	3.9	4.1	4.1
70°	120.7	34.0	9.4	7.2	5.8	4.5	3.9	3.4	3.8	3.9	3.9
72.5°	33.7	17.5	7.5	5.6	4.7	3.8	3.1	3.1	3.6	3.8	3.8
75°	21.9	13.0	5.8	4.2	3.6	3.0	2.7	3.0	3.4	3.6	3.6
77.5°	18.2	10.6	4.7	3.4	3.0	2.8	2.5	2.7	3.1	3.3	3.3
80°	16.6	7.5	3.8	3.1	2.7	2.5	2.3	2.2	2.8	3.0	3.0
82.5°	15.8	5.9	3.3	2.8	2.5	2.2	2.0	2.2	2.5	2.7	2.8
85°	9.9	3.9	3.0	2.7	2.2	2.0	2.0	2.0	2.3	2.5	2.5
87.5°	3.6	3.1	2.7	2.2	1.9	1.9	1.9	1.9	2.0	2.3	2.3
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)