

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: P301860

Luminaire Tested: **GLNA-AF-01-LED-E1-SL4-7027-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301860
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-SL4-7027-800-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 800mA 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: 3225.9 lumens
Efficiency: N/A
Efficacy: 73.3 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

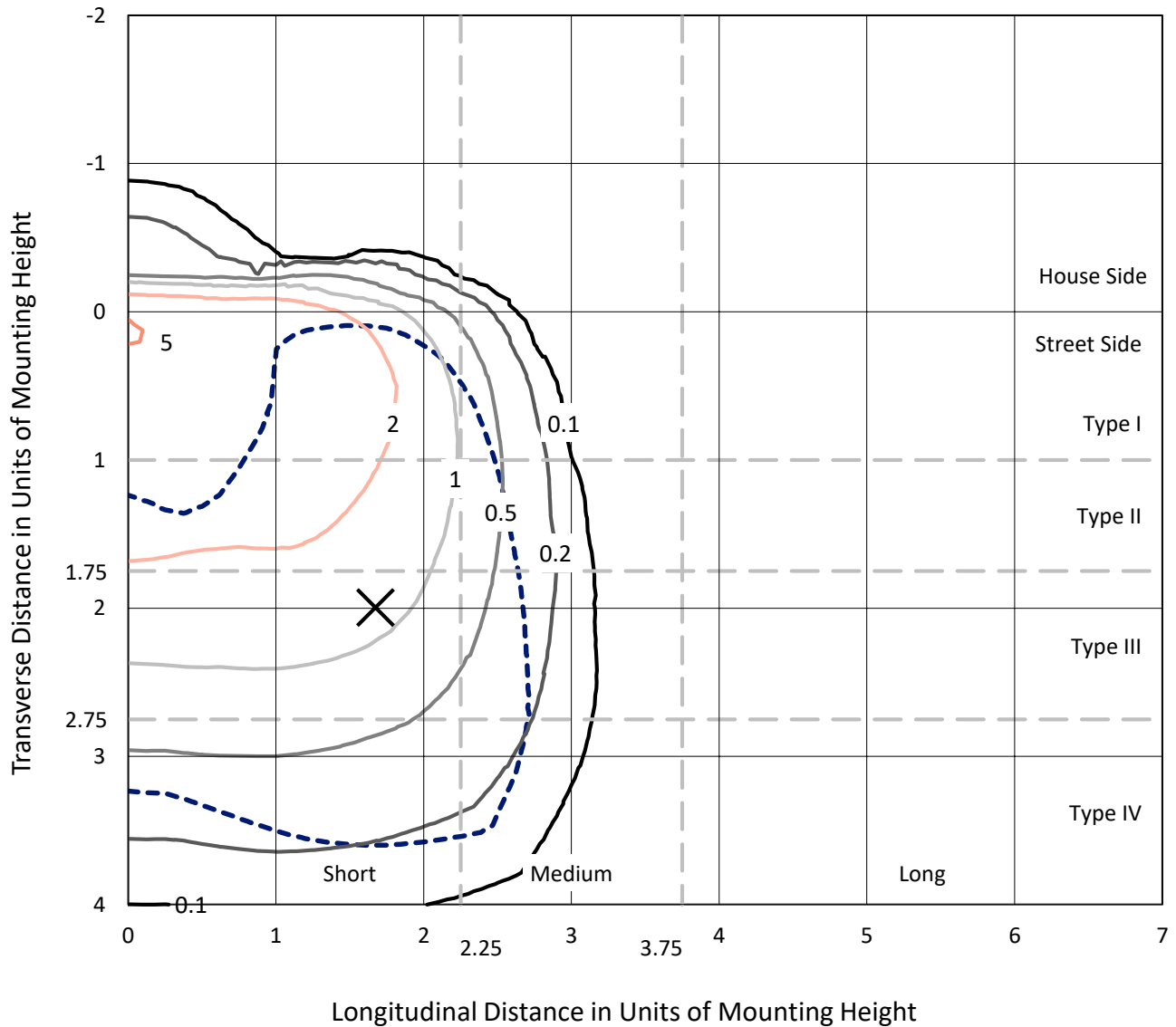
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

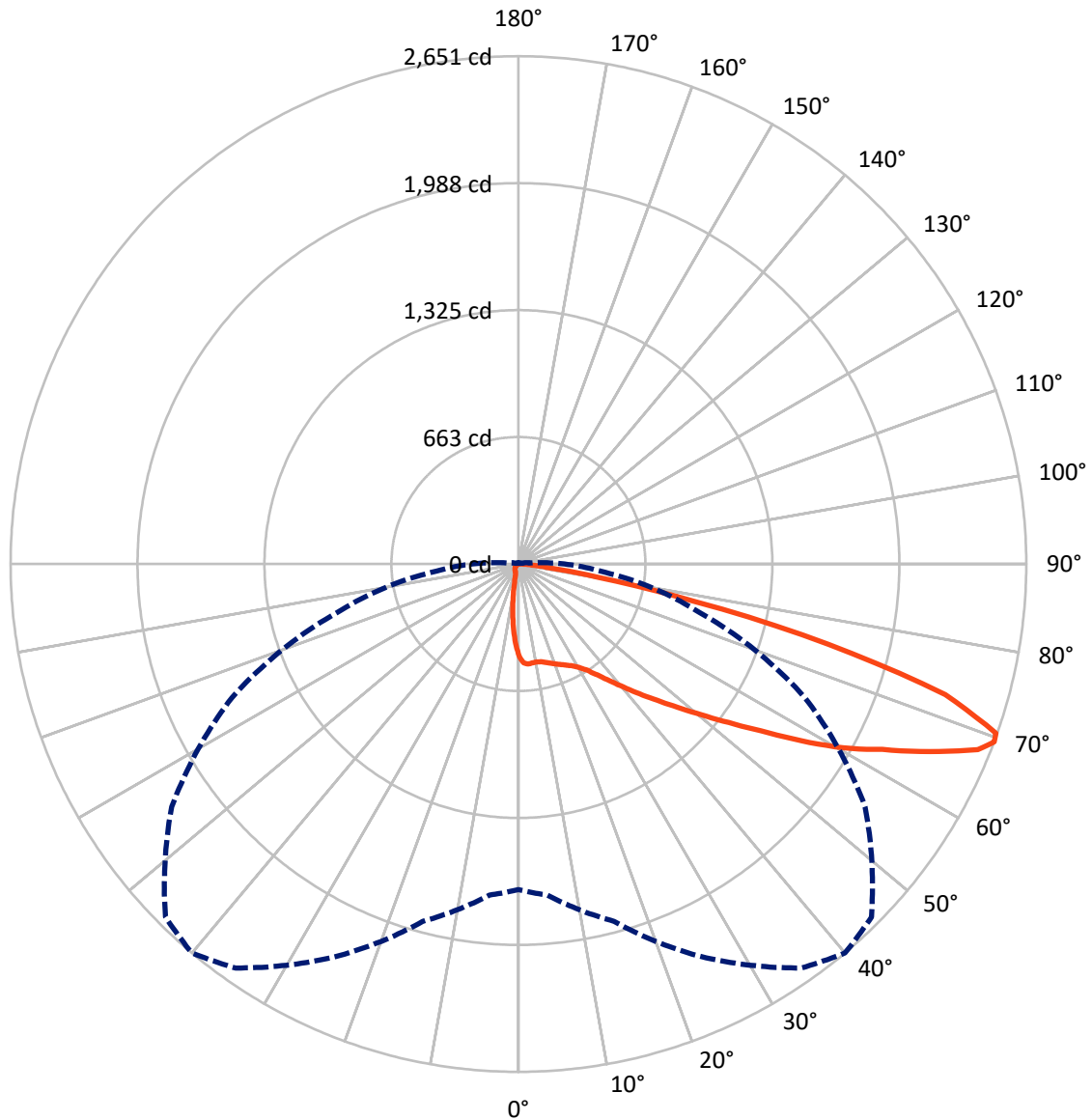


Based on 10 foot mounting height. Maximum calculated value = 5.3 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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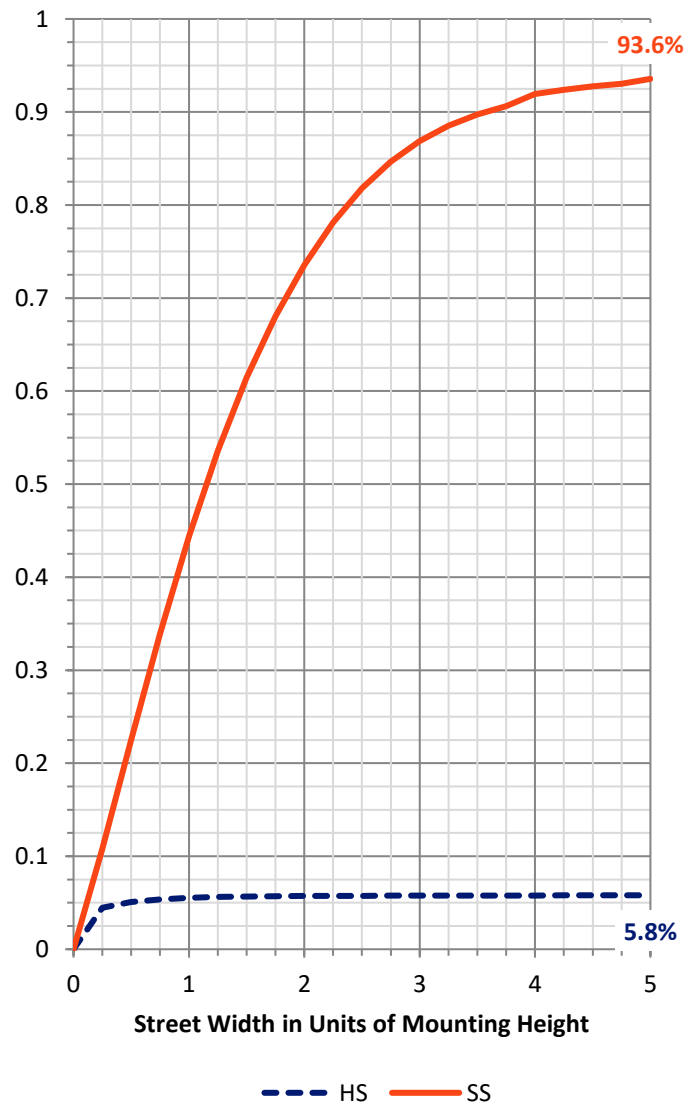
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	188.7	0.0	188.7
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	3037.2	0.0	3037.2
	% Fixture	94.1	0.0	94.1
Total	Lumens	3225.9	0.0	3225.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.1	1.2
10°-20°	96.1	3.0
20°-30°	161.9	5.0
30°-40°	265.0	8.2
40°-50°	458.8	14.2
50°-60°	722.7	22.4
60°-70°	943.8	29.3
70°-80°	486.1	15.1
80°-90°	52.6	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°	3225.9	100.0
0°-180°	3225.9	100.0



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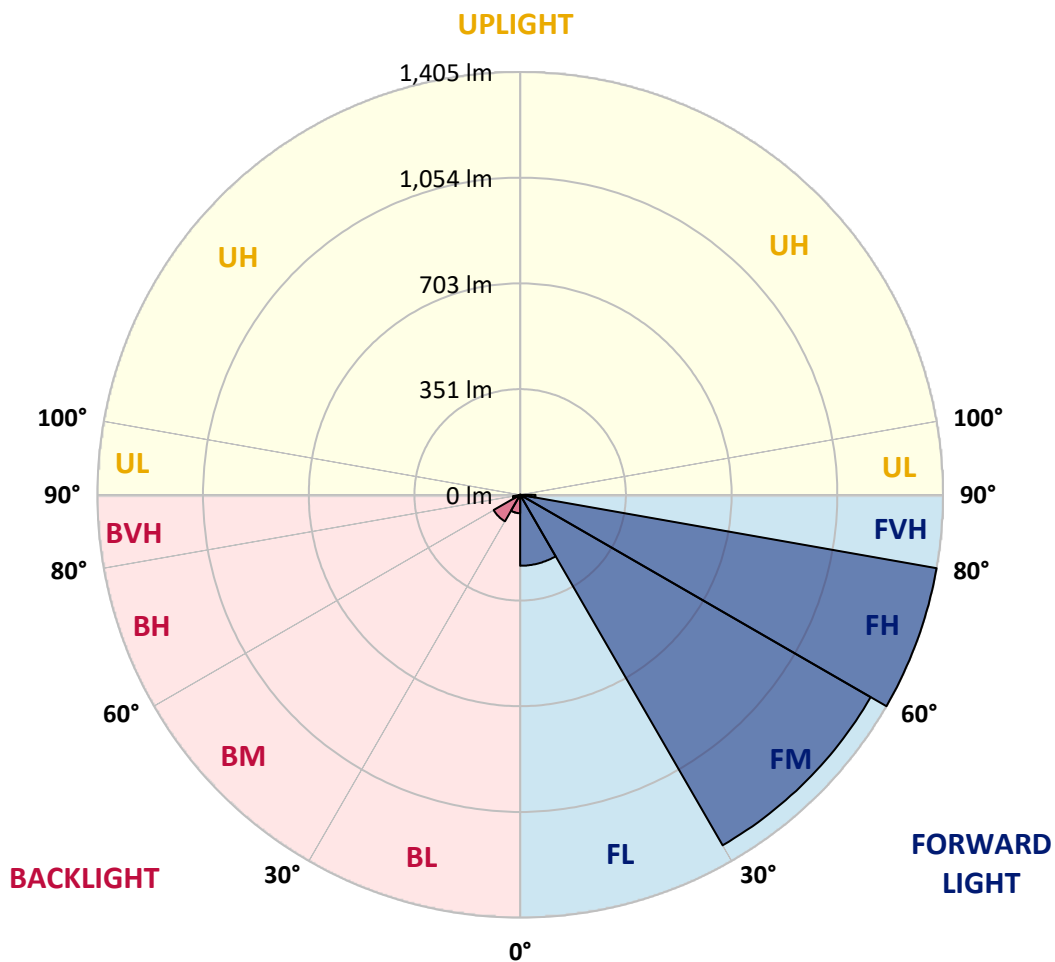
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	235.9	7.3			
FM	(30°-60°)	1345.0	41.7			
FH	(60°-80°)	1405.3	43.6			G1/1800
FVH	(80°-90°)	50.9	1.6			G1/100
BL	(0°-30°)	61.1	1.9	B0/110		
BM	(30°-60°)	101.4	3.1	B0/220		
BH	(60°-80°)	24.5	0.8	B0/110		G0/110
BVH	(80°-90°)	1.7	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	482.0	482.0	482.0	482.0	482.0	482.0	482.0	482.0	482.0	482.0	482.0
2.5°	529.2	526.3	524.6	522.3	519.4	516.9	516.0	508.9	502.1	492.9	482.4
5°	539.0	538.0	535.0	531.9	528.4	524.6	522.5	514.0	504.4	491.0	472.6
7.5°	540.0	538.8	535.0	530.7	525.9	521.3	517.7	509.2	500.4	486.8	464.3
10°	538.4	537.1	534.2	529.6	523.6	519.2	515.6	507.5	500.0	487.7	462.8
12.5°	536.7	535.4	534.0	531.7	526.5	523.4	520.4	512.7	506.0	495.6	468.3
15°	538.4	537.7	539.2	538.2	535.4	532.7	529.6	522.7	516.5	507.9	478.5
17.5°	545.7	545.7	550.5	551.1	548.4	544.6	540.2	533.2	528.1	520.8	490.6
20°	562.8	562.2	568.4	569.5	563.0	557.1	550.5	542.1	538.0	533.4	502.5
22.5°	592.2	589.5	593.1	592.0	579.1	569.9	561.9	551.5	549.4	547.3	515.8
25°	630.4	628.9	631.4	620.0	597.4	584.9	575.3	563.6	563.6	565.7	530.7
27.5°	685.9	680.1	671.7	651.7	617.7	601.8	591.4	578.9	582.2	590.1	550.5
30°	742.7	736.4	717.0	686.3	642.5	625.8	613.7	600.6	608.3	622.7	577.0
32.5°	798.8	791.7	764.2	725.5	678.0	661.3	649.6	635.2	648.1	672.3	615.8
35°	853.1	846.8	815.1	769.4	725.3	711.4	700.7	688.2	704.7	738.5	670.5
37.5°	914.2	907.3	868.7	819.2	782.7	772.7	764.8	752.3	781.1	830.7	746.8
40°	989.3	977.6	925.5	876.2	849.1	844.3	838.9	837.2	881.9	950.5	848.3
42.5°	1075.3	1056.1	985.1	936.3	922.1	925.5	924.2	931.9	1008.1	1099.5	972.0
45°	1161.3	1136.6	1051.3	1000.4	1002.3	1014.4	1021.9	1052.7	1166.1	1270.4	1105.1
47.5°	1234.3	1209.9	1114.9	1069.7	1092.8	1116.6	1137.0	1195.1	1328.6	1438.6	1208.6
50°	1296.7	1273.7	1182.3	1146.0	1197.8	1236.2	1269.3	1355.5	1503.3	1566.7	1281.2
52.5°	1347.8	1332.4	1252.2	1233.3	1317.8	1374.1	1422.5	1525.8	1658.1	1670.8	1337.6
55°	1397.5	1386.6	1327.2	1337.2	1458.8	1535.4	1596.6	1706.5	1791.4	1757.6	1391.8
57.5°	1454.7	1444.8	1412.9	1469.0	1644.1	1740.5	1807.3	1866.6	1908.7	1846.3	1442.8
60°	1513.1	1507.4	1508.1	1615.3	1856.8	1949.4	1986.3	2001.6	2023.9	1929.8	1445.7
62.5°	1568.8	1579.7	1617.0	1778.1	2060.6	2131.6	2150.2	2165.4	2139.3	1943.1	1335.7
65°	1663.1	1680.9	1769.8	1996.0	2284.7	2360.7	2379.9	2327.9	2157.5	1771.8	1086.4
67.5°	1709.2	1741.8	1900.4	2199.2	2502.0	2586.5	2579.4	2338.4	1936.1	1351.1	697.2
69°	1699.6	1734.3	1930.6	2261.4	2574.2	2650.8	2605.7	2209.2	1649.5	978.7	428.0
70°	1661.5	1696.7	1915.0	2259.1	2583.4	2644.1	2556.9	2049.6	1394.6	715.7	267.7
72.5°	1387.5	1417.9	1700.1	2041.9	2379.9	2330.5	2139.1	1420.0	679.6	194.9	60.3
75°	854.1	871.0	1219.9	1538.3	1797.5	1670.8	1425.2	706.4	202.6	55.1	33.4
77.5°	451.2	458.9	667.8	906.7	1139.4	942.8	730.4	275.5	93.3	34.6	24.2
80°	266.7	272.5	359.7	414.6	493.1	411.9	292.1	169.2	66.8	21.7	21.5
82.5°	152.7	156.3	260.8	230.4	194.3	165.9	145.4	160.3	40.1	14.6	22.3
85°	56.1	56.8	146.7	175.3	115.6	68.7	72.2	132.9	10.8	9.2	17.5
87.5°	26.1	25.5	75.5	107.3	67.6	43.6	56.3	29.2	4.2	6.0	4.8
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°	482.0	482.0	482.0	482.0	482.0	482.0	482.0	482.0	482.0	482.0	482.0
2.5°	476.2	469.1	456.2	443.0	429.5	419.2	409.0	400.9	398.2	393.3	393.6
5°	461.6	448.6	421.7	394.4	366.0	342.6	320.5	302.6	294.0	285.1	285.1
7.5°	448.9	429.9	387.9	343.5	297.6	259.0	224.3	198.2	183.8	172.2	172.0
10°	444.1	418.4	359.7	296.1	232.2	179.5	138.3	111.8	98.1	89.3	88.9
12.5°	446.3	414.4	338.0	252.3	172.0	115.4	80.1	63.0	57.2	54.5	54.5
15°	452.4	413.2	316.3	209.5	121.5	72.2	53.2	48.6	48.2	48.2	48.2
17.5°	459.9	413.6	294.0	167.8	82.8	51.7	45.9	45.3	45.7	45.7	45.7
20°	467.6	413.8	270.0	129.2	58.4	44.9	43.2	43.0	43.4	43.4	43.6
22.5°	477.0	414.8	246.0	96.6	48.2	42.4	41.1	41.1	41.3	41.3	41.1
25°	487.7	416.7	221.0	71.6	44.0	40.7	39.6	39.4	39.6	39.4	39.2
27.5°	501.2	419.4	193.2	56.1	42.1	39.0	38.0	38.0	37.8	37.6	37.4
30°	518.1	422.4	161.9	47.6	40.1	37.4	36.5	36.3	36.1	35.7	35.7
32.5°	543.8	429.2	131.0	43.2	38.0	35.3	34.6	34.6	34.2	33.8	33.6
35°	583.4	442.4	103.3	40.5	35.7	33.0	32.1	32.1	31.7	31.5	31.3
37.5°	638.1	462.6	80.3	38.0	33.4	30.5	29.6	29.4	29.0	28.6	28.4
40°	710.9	487.5	63.2	35.7	31.1	28.0	27.3	26.9	26.1	25.5	25.5
42.5°	802.3	516.0	51.3	33.2	28.4	25.7	25.2	24.6	23.2	22.7	22.5
45°	897.9	541.5	43.4	30.3	25.7	23.4	23.0	22.1	20.4	19.8	19.8
47.5°	966.8	547.4	38.2	27.7	23.2	20.9	20.7	19.0	17.5	17.1	16.9
50°	1009.8	535.7	34.0	25.0	20.9	18.6	18.0	15.9	15.0	14.6	14.4
52.5°	1038.8	514.8	30.5	22.7	18.8	16.5	15.2	13.6	12.9	12.5	12.5
55°	1062.1	485.2	27.1	20.5	17.1	14.8	12.9	11.7	10.9	10.6	10.6
57.5°	1068.6	445.1	23.6	18.8	15.4	13.1	10.9	10.2	9.2	9.0	9.0
60°	1021.2	372.7	20.9	16.7	13.8	11.3	9.6	8.6	7.7	7.5	7.3
62.5°	896.2	288.4	18.4	14.8	12.1	9.8	8.3	7.1	6.3	6.3	6.3
65°	683.6	193.4	16.1	12.9	10.6	8.3	7.1	5.8	5.4	5.4	5.6
67.5°	409.2	105.2	13.8	10.9	9.0	6.9	6.0	5.0	4.8	5.0	5.0
69°	239.8	61.8	12.5	9.8	7.9	6.1	5.2	4.4	4.8	5.0	5.0
70°	148.0	41.7	11.5	8.8	7.1	5.6	4.8	4.2	4.6	4.8	4.8
72.5°	41.3	21.5	9.2	6.9	5.8	4.6	3.8	3.8	4.4	4.6	4.6
75°	26.9	15.9	7.1	5.2	4.4	3.6	3.3	3.6	4.2	4.4	4.4
77.5°	22.3	13.1	5.8	4.2	3.6	3.5	3.1	3.3	3.8	4.0	4.0
80°	20.4	9.2	4.6	3.8	3.3	3.1	2.9	2.7	3.5	3.6	3.6
82.5°	19.4	7.3	4.0	3.5	3.1	2.7	2.5	2.7	3.1	3.3	3.5
85°	12.1	4.8	3.6	3.3	2.7	2.5	2.5	2.5	2.9	3.1	3.1
87.5°	4.4	3.8	3.3	2.7	2.3	2.3	2.3	2.3	2.5	2.9	2.9
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)