

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: P301926

Luminaire Tested: **GLNA-AF-02-LED-E1-SL4-7027-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P301926
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-02-LED-E1-SL4-7027-600-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 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: 5140.1 lumens
Efficiency: N/A
Efficacy: 77.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G2

Input Watts (W): 66
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

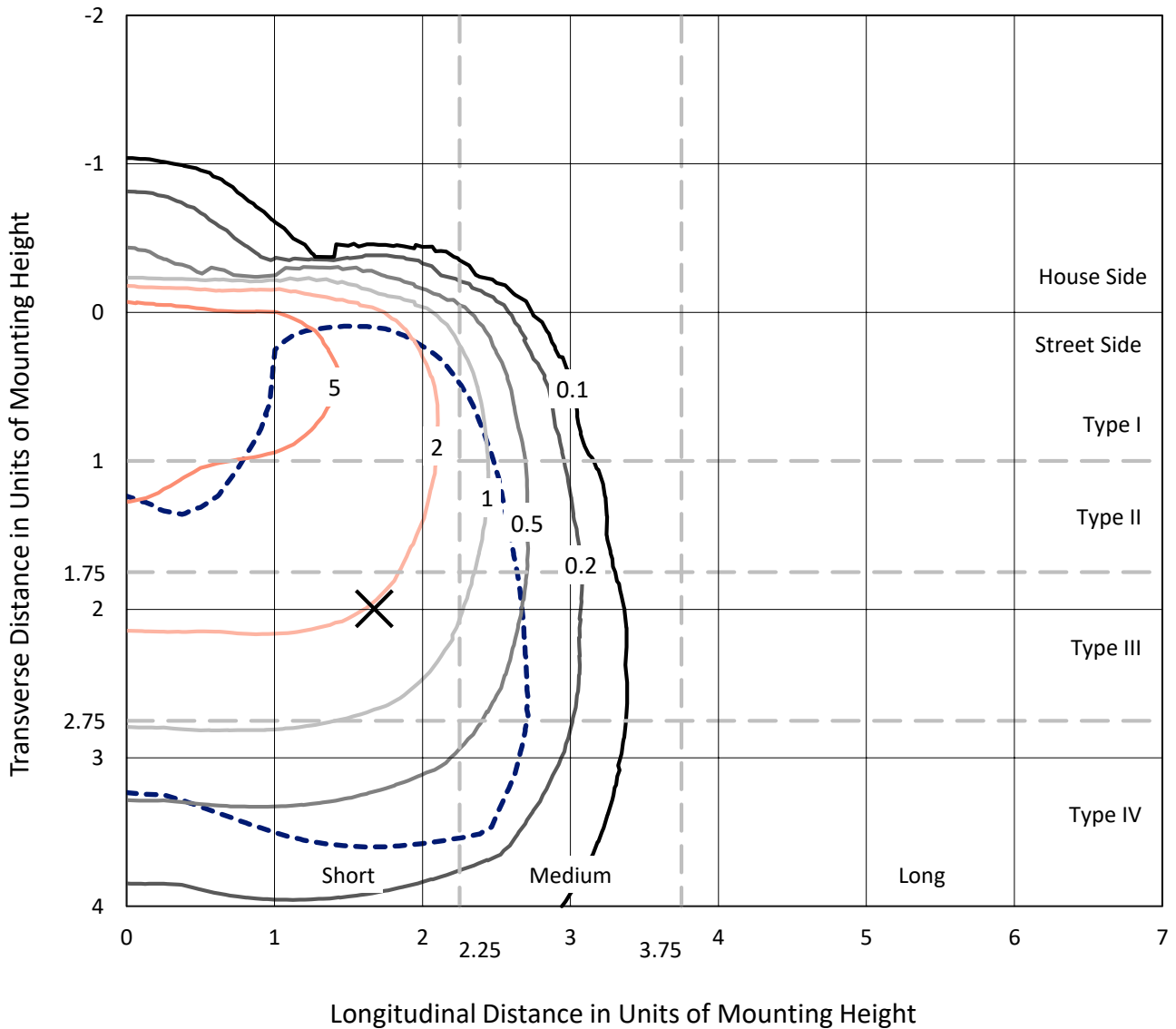


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

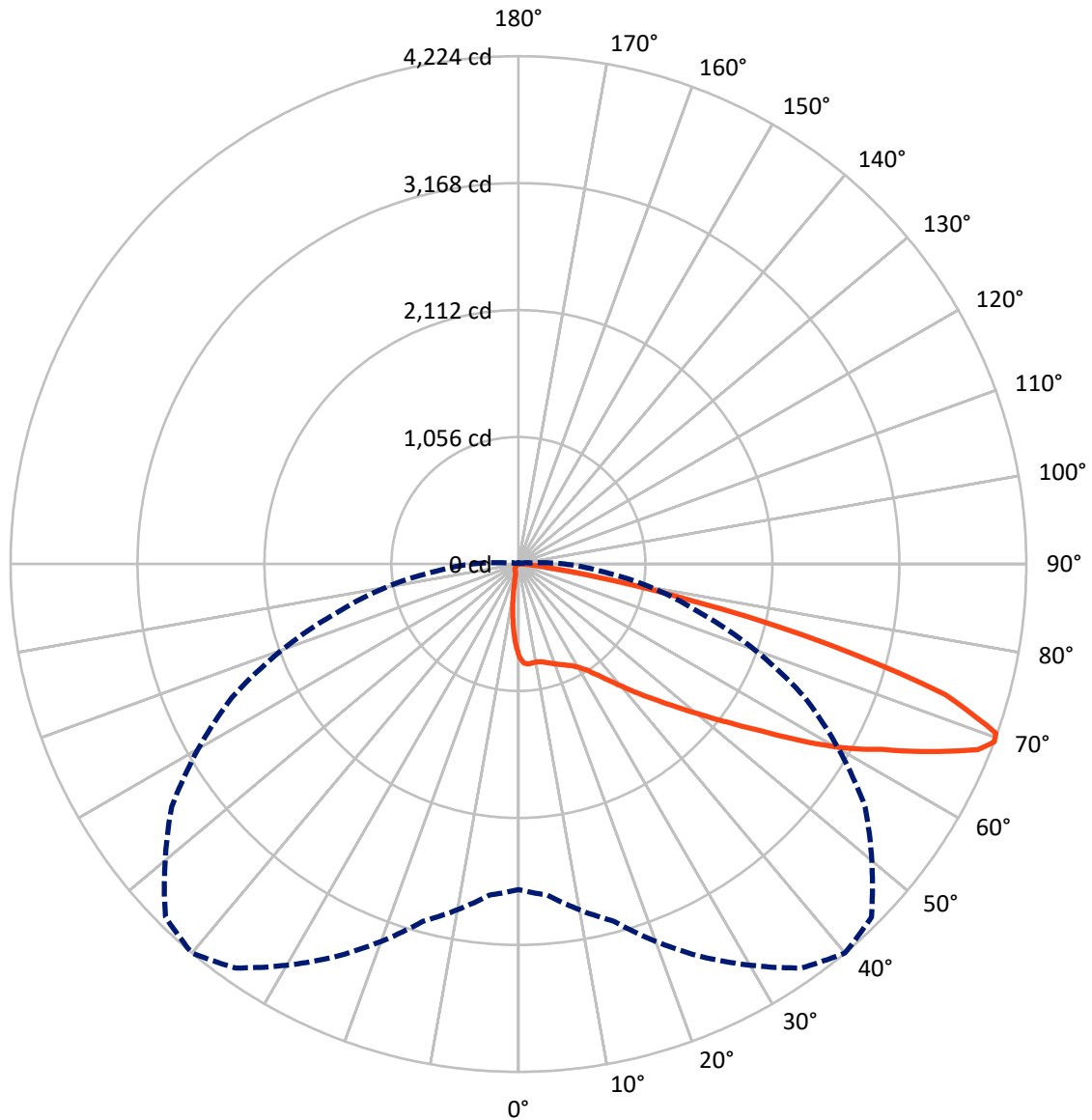


Based on 10 foot mounting height. Maximum calculated value = 8.4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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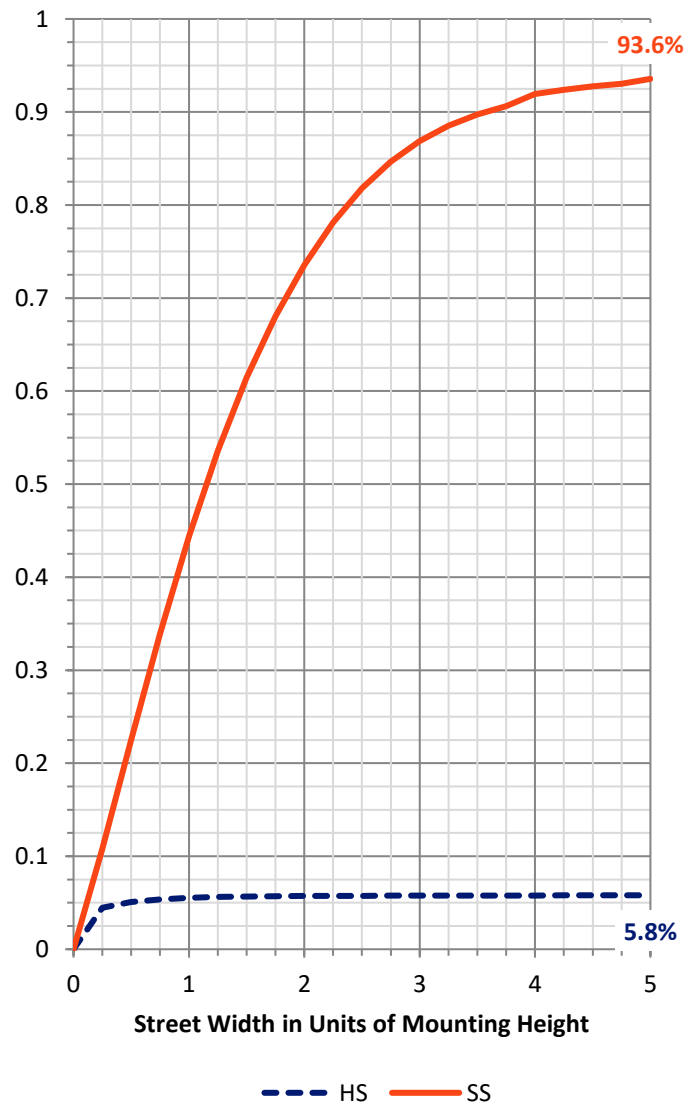
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	300.7	0.0	300.7
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	4839.4	0.0	4839.4
	% Fixture	94.1	0.0	94.1
Total	Lumens	5140.1	0.0	5140.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.3	1.2
10°-20°	153.1	3.0
20°-30°	257.9	5.0
30°-40°	422.2	8.2
40°-50°	731.0	14.2
50°-60°	1151.5	22.4
60°-70°	1503.8	29.3
70°-80°	774.5	15.1
80°-90°	83.8	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°	5140.1	100.0
0°-180°	5140.1	100.0



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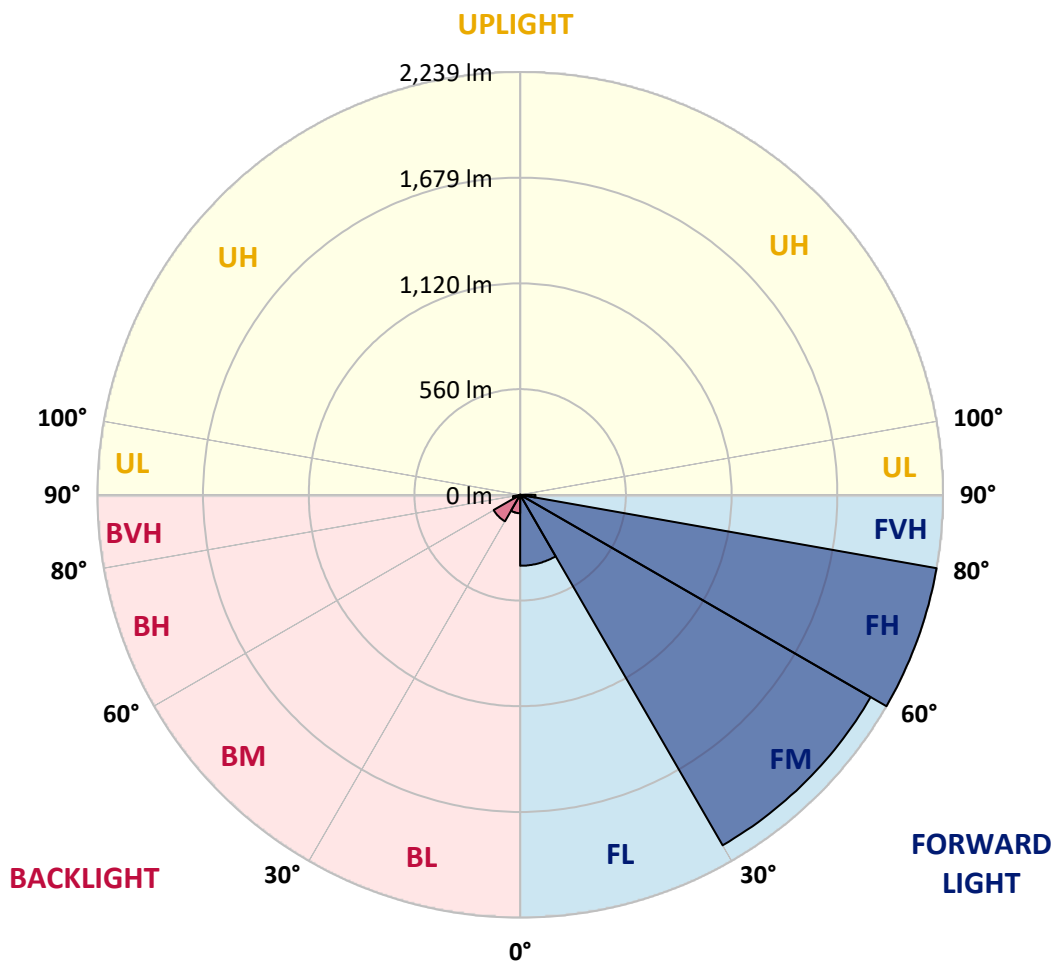
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	375.9	7.3			
FM	(30°-60°)	2143.1	41.7			
FH	(60°-80°)	2239.3	43.6			G2/5000
FVH	(80°-90°)	81.1	1.6			G1/100
BL	(0°-30°)	97.4	1.9	B0/110		
BM	(30°-60°)	161.6	3.1	B0/220		
BH	(60°-80°)	39.0	0.8	B0/110		G0/110
BVH	(80°-90°)	2.6	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-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	768.0	768.0	768.0	768.0	768.0	768.0	768.0	768.0	768.0	768.0	768.0
2.5°	843.2	838.6	835.9	832.2	827.6	823.6	822.1	810.8	800.1	785.4	768.6
5°	858.8	857.3	852.4	847.5	842.0	835.9	832.5	819.1	803.8	782.3	753.0
7.5°	860.4	858.5	852.4	845.7	838.0	830.7	824.9	811.4	797.3	775.6	739.8
10°	857.9	855.8	851.2	843.8	834.4	827.3	821.5	808.7	796.7	777.1	737.4
12.5°	855.2	853.0	850.9	847.2	838.9	834.0	829.2	816.9	806.2	789.7	746.2
15°	857.9	856.7	859.1	857.6	853.0	848.7	843.8	832.8	823.0	809.3	762.5
17.5°	869.5	869.5	877.2	878.1	873.8	867.7	860.7	849.7	841.4	829.8	781.7
20°	896.8	895.9	905.6	907.5	897.1	887.6	877.2	863.7	857.3	850.0	800.7
22.5°	943.6	939.3	945.1	943.3	922.8	908.1	895.2	878.7	875.4	872.0	821.8
25°	1004.5	1002.0	1006.0	987.9	951.8	932.0	916.7	898.0	898.0	901.4	845.7
27.5°	1092.9	1083.7	1070.3	1038.4	984.3	958.9	942.4	922.5	927.7	940.2	877.2
30°	1183.5	1173.4	1142.5	1093.5	1023.7	997.1	977.9	957.0	969.3	992.2	919.4
32.5°	1272.8	1261.5	1217.7	1155.9	1080.3	1053.7	1035.1	1012.1	1032.6	1071.2	981.2
35°	1359.4	1349.3	1298.8	1226.0	1155.6	1133.6	1116.5	1096.6	1122.9	1176.7	1068.4
37.5°	1456.7	1445.7	1384.2	1305.2	1247.1	1231.2	1218.6	1198.8	1244.6	1323.6	1189.9
40°	1576.3	1557.6	1474.7	1396.1	1353.0	1345.3	1336.7	1334.0	1405.3	1514.5	1351.7
42.5°	1713.4	1682.8	1569.6	1491.9	1469.2	1474.7	1472.6	1484.8	1606.3	1751.9	1548.8
45°	1850.5	1811.0	1675.1	1594.1	1597.1	1616.4	1628.3	1677.3	1858.1	2024.2	1760.8
47.5°	1966.7	1927.9	1776.4	1704.5	1741.2	1779.2	1811.6	1904.3	2116.9	2292.3	1925.7
50°	2066.2	2029.4	1883.8	1826.0	1908.6	1969.8	2022.4	2159.8	2395.4	2496.3	2041.4
52.5°	2147.5	2123.1	1995.2	1965.2	2099.8	2189.5	2266.6	2431.2	2642.0	2662.2	2131.3
55°	2226.8	2209.3	2114.8	2130.7	2324.4	2446.5	2544.1	2719.1	2854.3	2800.5	2217.6
57.5°	2318.0	2302.0	2251.3	2340.6	2619.6	2773.2	2879.7	2974.2	3041.2	2941.8	2299.0
60°	2411.0	2401.8	2403.0	2573.7	2958.6	3106.1	3164.9	3189.3	3224.8	3074.9	2303.6
62.5°	2499.7	2517.1	2576.5	2833.2	3283.3	3396.5	3426.1	3450.3	3408.7	3096.0	2128.3
65°	2649.9	2678.4	2820.0	3180.5	3640.3	3761.5	3792.1	3709.2	3437.8	2823.1	1731.1
67.5°	2723.4	2775.4	3028.1	3504.2	3986.7	4121.3	4110.0	3726.0	3085.0	2152.7	1110.9
69°	2708.1	2763.4	3076.1	3603.3	4101.7	4223.8	4151.9	3520.1	2628.2	1559.5	682.0
70°	2647.5	2703.5	3051.3	3599.6	4116.4	4213.1	4074.2	3265.8	2222.2	1140.3	426.5
72.5°	2210.9	2259.2	2709.0	3253.6	3792.1	3713.4	3408.4	2262.6	1082.8	310.6	96.1
75°	1360.9	1387.8	1943.8	2451.1	2864.1	2662.2	2270.8	1125.6	322.8	87.8	53.2
77.5°	719.0	731.2	1064.1	1444.7	1815.6	1502.3	1163.9	439.1	148.7	55.1	38.6
80°	425.0	434.2	573.1	660.6	785.7	656.3	465.4	269.6	106.5	34.6	34.3
82.5°	243.2	249.1	415.5	367.2	309.6	264.4	231.6	255.5	63.9	23.3	35.5
85°	89.3	90.6	233.8	279.3	184.2	109.5	115.0	211.7	17.1	14.7	27.8
87.5°	41.6	40.7	120.2	171.0	107.7	69.5	89.6	46.5	6.7	9.5	7.6
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°	768.0	768.0	768.0	768.0	768.0	768.0	768.0	768.0	768.0	768.0	768.0
2.5°	758.8	747.5	727.0	705.9	684.4	667.9	651.7	638.8	634.6	626.6	627.2
5°	735.5	714.7	671.9	628.4	583.2	545.8	510.6	482.2	468.4	454.4	454.4
7.5°	715.3	685.0	618.0	547.4	474.2	412.7	357.4	315.8	292.8	274.4	274.1
10°	707.7	666.7	573.1	471.8	369.9	286.1	220.3	178.1	156.3	142.3	141.7
12.5°	711.1	660.3	538.5	402.0	274.1	183.9	127.6	100.4	91.2	86.9	86.9
15°	720.8	658.4	503.9	333.8	193.7	115.0	84.8	77.4	76.8	76.8	76.8
17.5°	732.8	659.0	468.4	267.4	131.9	82.3	73.1	72.2	72.8	72.8	72.8
20°	745.0	659.3	430.2	205.9	93.0	71.6	68.8	68.5	69.1	69.1	69.5
22.5°	760.0	660.9	391.9	153.9	76.8	67.6	65.5	65.5	65.8	65.8	65.5
25°	777.1	663.9	352.2	114.1	70.1	64.9	63.0	62.7	63.0	62.7	62.4
27.5°	798.6	668.2	307.8	89.3	67.0	62.1	60.6	60.6	60.3	60.0	59.7
30°	825.5	673.1	257.9	75.9	63.9	59.7	58.1	57.8	57.5	56.9	56.9
32.5°	866.5	683.8	208.7	68.8	60.6	56.3	55.1	55.1	54.5	53.8	53.5
35°	929.5	704.9	164.6	64.6	56.9	52.6	51.1	51.1	50.5	50.2	49.9
37.5°	1016.7	737.1	127.9	60.6	53.2	48.6	47.1	46.8	46.2	45.6	45.3
40°	1132.7	776.8	100.7	56.9	49.6	44.7	43.4	42.8	41.6	40.7	40.7
42.5°	1278.3	822.1	81.7	52.9	45.3	41.0	40.1	39.2	37.0	36.1	35.8
45°	1430.7	862.8	69.1	48.3	41.0	37.3	36.7	35.2	32.4	31.5	31.5
47.5°	1540.5	872.3	60.9	44.1	37.0	33.3	33.0	30.3	27.8	27.2	26.9
50°	1609.0	853.6	54.2	39.8	33.3	29.7	28.8	25.4	23.9	23.3	22.9
52.5°	1655.2	820.3	48.6	36.1	30.0	26.3	24.2	21.7	20.5	19.9	19.9
55°	1692.3	773.2	43.1	32.7	27.2	23.6	20.5	18.7	17.4	16.8	16.8
57.5°	1702.7	709.2	37.6	30.0	24.5	20.8	17.4	16.2	14.7	14.4	14.4
60°	1627.1	593.9	33.3	26.6	22.0	18.1	15.3	13.8	12.2	11.9	11.6
62.5°	1427.9	459.6	29.4	23.6	19.3	15.6	13.2	11.3	10.1	10.1	10.1
65°	1089.2	308.1	25.7	20.5	16.8	13.2	11.3	9.2	8.6	8.6	8.9
67.5°	652.0	167.7	22.0	17.4	14.4	11.0	9.5	8.0	7.6	8.0	8.0
69°	382.1	98.5	19.9	15.6	12.5	9.8	8.3	7.0	7.6	8.0	8.0
70°	235.9	66.4	18.4	14.1	11.3	8.9	7.6	6.7	7.3	7.6	7.6
72.5°	65.8	34.3	14.7	11.0	9.2	7.3	6.1	6.1	7.0	7.3	7.3
75°	42.8	25.4	11.3	8.3	7.0	5.8	5.2	5.8	6.7	7.0	7.0
77.5°	35.5	20.8	9.2	6.7	5.8	5.5	4.9	5.2	6.1	6.4	6.4
80°	32.4	14.7	7.3	6.1	5.2	4.9	4.6	4.3	5.5	5.8	5.8
82.5°	30.9	11.6	6.4	5.5	4.9	4.3	4.0	4.3	4.9	5.2	5.5
85°	19.3	7.6	5.8	5.2	4.3	4.0	4.0	4.0	4.6	4.9	4.9
87.5°	7.0	6.1	5.2	4.3	3.7	3.7	3.7	3.7	4.0	4.6	4.6
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)