

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: P299938

Luminaire Tested: **GLNA-AF-01-LED-E1-SL3-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299938
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24288)
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-SL3-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Medium OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4091.8 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

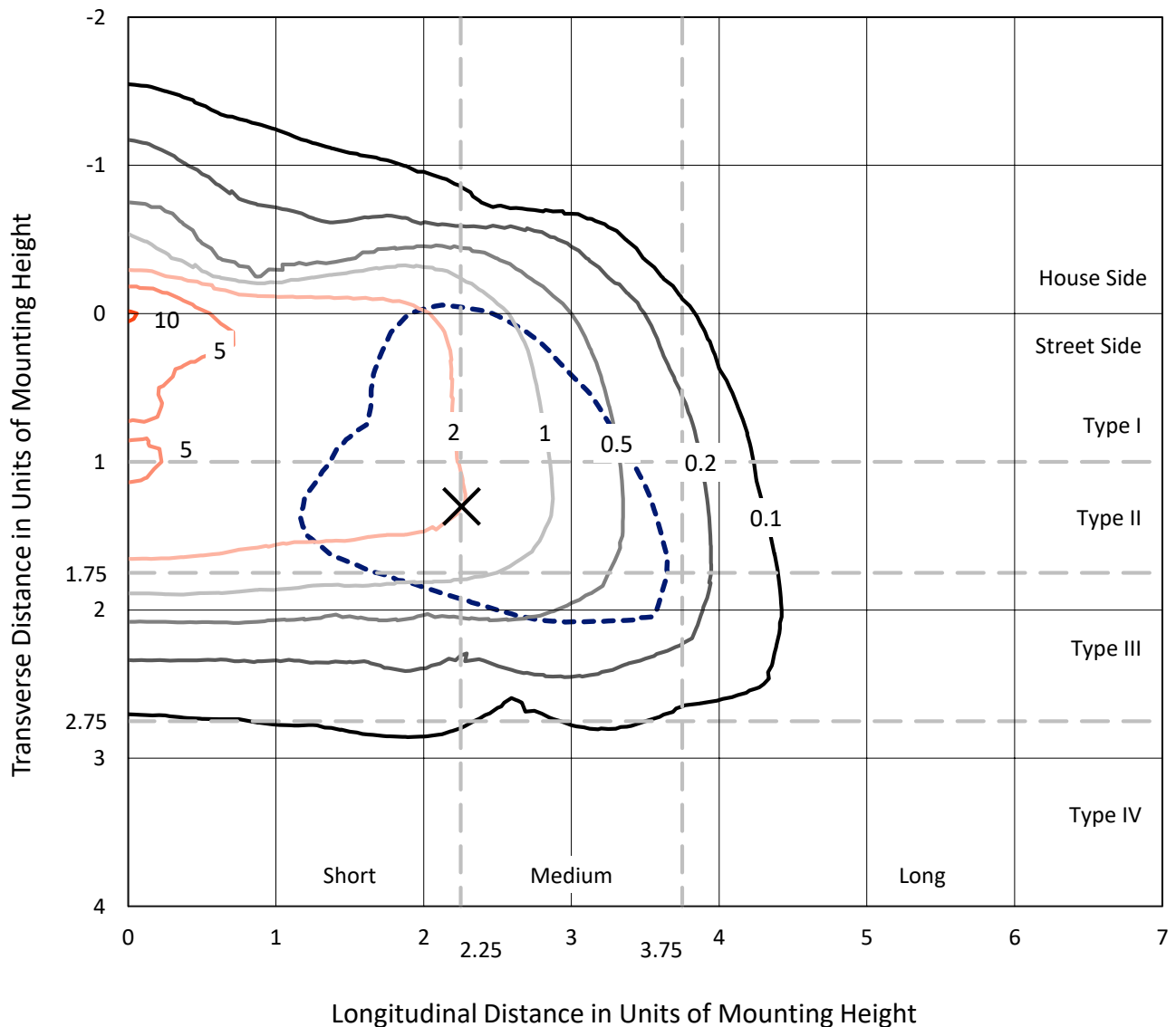
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

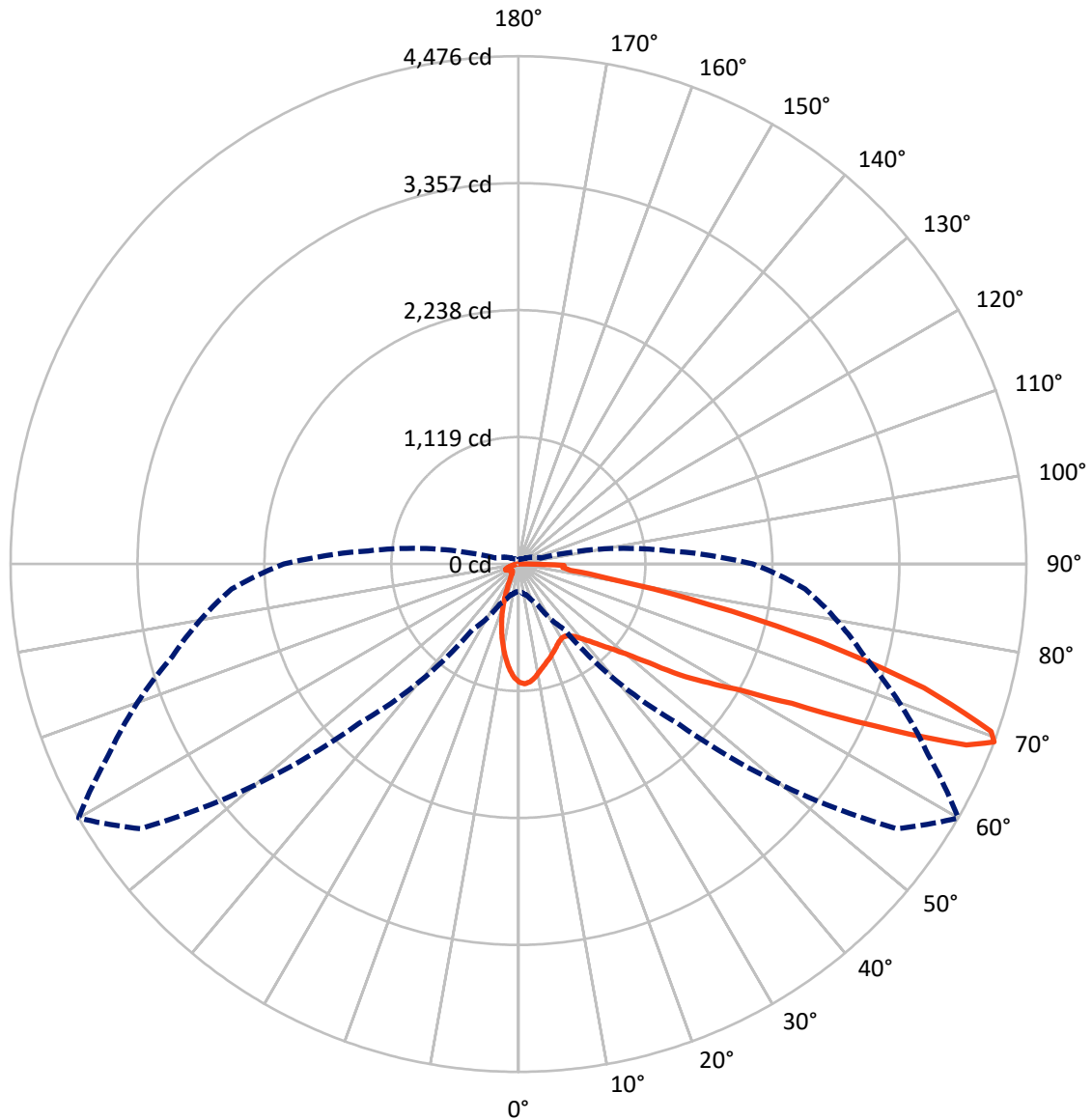
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.4 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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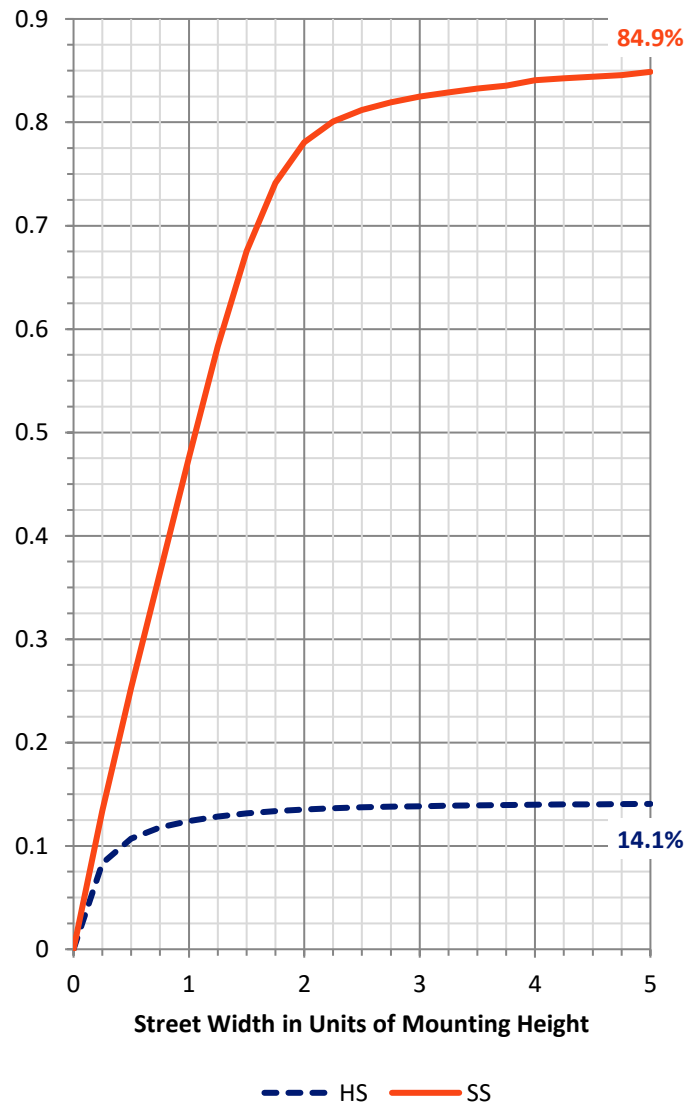
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	582.1	0.0	582.1
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	3509.7	0.0	3509.7
	% Fixture	85.8	0.0	85.8
Total	Lumens	4091.8	0.0	4091.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.2	2.2
10°-20°	187.8	4.6
20°-30°	239.3	5.8
30°-40°	329.0	8.0
40°-50°	533.9	13.0
50°-60°	856.2	20.9
60°-70°	1139.5	27.8
70°-80°	615.2	15.0
80°-90°	102.7	2.5
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°	4091.8	100.0
0°-180°	4091.8	100.0



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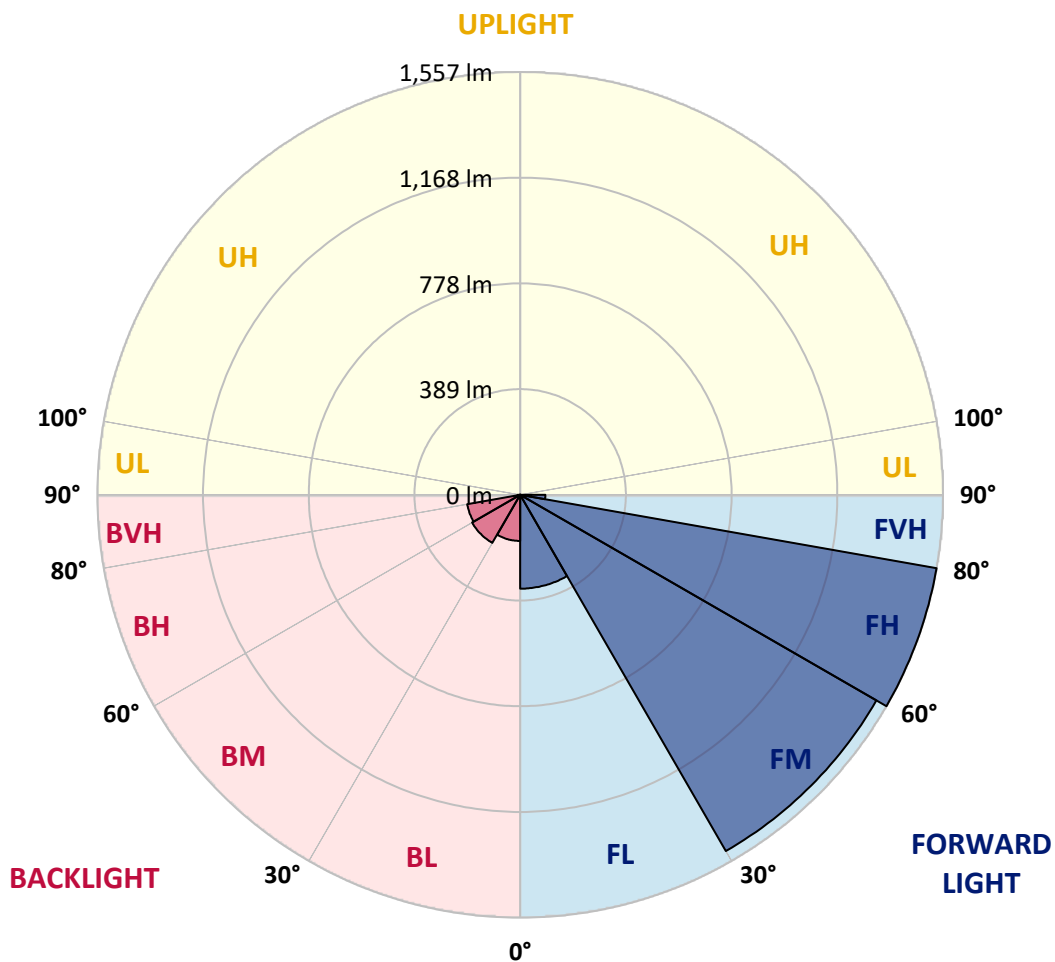
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	345.5	8.4			
FM	(30°-60°)	1514.5	37.0			
FH	(60°-80°)	1556.8	38.0			G1/1800
FVH	(80°-90°)	92.8	2.3			G1/100
BL	(0°-30°)	169.8	4.2	B1/500		
BM	(30°-60°)	204.5	5.0	B0/220		
BH	(60°-80°)	197.9	4.8	B1/500		G1/500
BVH	(80°-90°)	9.9	0.2			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	1042.6	1042.6	1042.6	1042.6	1042.6	1042.6	1042.6	1042.6	1042.6	1042.6	1042.6
2.5°	1064.0	1066.4	1065.4	1064.8	1066.6	1063.8	1058.1	1056.3	1053.5	1047.0	1035.9
5°	1024.1	1031.2	1030.8	1036.1	1045.0	1047.4	1044.8	1045.2	1040.1	1032.0	1013.6
7.5°	955.1	958.1	959.6	971.3	987.5	1000.5	1011.6	1015.2	1012.8	1005.9	982.2
10°	883.9	886.3	890.1	903.7	924.3	942.2	963.2	975.2	980.4	979.2	952.7
12.5°	822.9	825.2	830.2	845.6	870.1	892.2	922.7	937.7	949.9	957.3	928.8
15°	768.1	773.2	778.0	795.8	823.2	852.3	886.7	905.7	924.6	941.1	907.6
17.5°	725.4	730.5	733.3	749.5	778.8	814.4	854.7	877.0	900.7	927.6	886.7
20°	700.7	703.1	701.9	711.0	737.3	775.0	822.9	848.7	877.4	915.0	865.7
22.5°	693.8	694.0	689.6	688.6	705.6	737.5	788.9	820.3	855.5	906.7	847.8
25°	710.6	710.0	698.1	688.4	690.2	708.8	756.0	792.6	837.1	904.9	833.9
27.5°	747.9	749.7	732.1	713.9	696.0	695.4	731.1	769.7	822.1	913.0	828.0
30°	800.3	803.3	784.5	761.4	727.6	699.7	721.5	756.0	812.8	929.8	827.0
32.5°	857.6	860.8	846.6	822.3	778.0	726.6	728.2	757.2	812.4	953.3	833.7
35°	918.7	922.3	915.0	894.4	845.2	776.2	753.9	776.4	825.2	989.3	851.7
37.5°	986.9	992.4	994.4	974.9	922.3	841.6	796.0	812.8	854.3	1039.3	884.7
40°	1085.1	1092.9	1092.3	1064.2	1010.6	930.0	861.0	865.4	899.5	1106.1	937.5
42.5°	1273.3	1274.9	1225.7	1164.6	1107.9	1022.9	937.7	934.1	962.0	1190.7	1015.2
45°	1512.7	1506.2	1396.7	1278.7	1209.5	1129.6	1037.5	1020.1	1041.3	1293.9	1112.4
47.5°	1711.3	1696.3	1557.9	1395.1	1317.0	1245.6	1154.7	1124.3	1135.9	1410.9	1238.1
50°	1780.3	1769.0	1654.4	1491.9	1418.8	1387.2	1299.0	1255.9	1259.1	1550.4	1385.4
52.5°	1765.5	1763.9	1687.4	1555.8	1514.1	1535.8	1503.4	1445.1	1414.2	1705.4	1544.3
55°	1730.5	1733.9	1706.2	1630.1	1623.0	1679.3	1770.4	1727.3	1631.5	1861.7	1708.6
57.5°	1608.9	1617.6	1678.5	1723.6	1798.3	1882.1	1985.5	1973.2	1865.3	2030.7	1903.8
60°	1296.2	1316.4	1479.7	1705.4	1978.8	2240.9	2287.1	2258.6	2106.4	2240.5	2161.8
62.5°	908.2	929.2	1123.3	1476.5	1949.1	2646.1	2826.3	2703.6	2452.7	2549.4	2495.6
65°	486.2	496.3	644.6	1024.5	1645.5	2729.7	3614.4	3427.6	3001.1	2930.3	2781.3
67.5°	268.2	273.8	330.5	517.3	1053.9	2403.7	4116.4	4257.6	3686.3	3183.9	2729.3
69°	242.5	247.7	284.8	391.8	705.2	1987.5	4067.4	4476.4	3986.8	3158.8	2537.1
70°	237.2	241.9	275.3	361.1	570.8	1638.2	3903.2	4420.4	4058.3	3068.8	2369.5
72.5°	213.5	218.6	251.0	324.4	487.8	816.7	3091.8	3737.5	3684.6	2660.9	1797.3
75°	199.0	203.8	258.7	317.6	467.1	516.9	2038.3	2754.6	2708.5	1861.4	969.1
77.5°	85.2	84.8	120.0	268.8	474.0	500.5	1095.2	1720.8	1570.0	795.6	278.3
80°	56.9	55.9	56.9	79.1	434.7	503.2	573.8	873.5	659.8	202.8	137.2
82.5°	49.0	48.2	50.0	48.2	152.8	574.4	487.8	464.5	313.7	115.2	68.0
85°	33.0	31.6	43.1	43.3	72.1	510.4	549.5	392.4	253.8	68.4	33.6
87.5°	15.8	15.4	25.1	30.6	42.3	207.3	616.5	402.0	256.0	35.0	16.0
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°	1042.6	1042.6	1042.6	1042.6	1042.6	1042.6	1042.6	1042.6	1042.6	1042.6	1042.6
2.5°	1032.6	1024.5	1016.6	1007.1	997.2	986.1	980.6	975.1	973.7	972.1	966.6
5°	1004.1	992.6	972.9	951.1	928.2	905.9	888.9	878.2	870.1	865.9	858.6
7.5°	967.3	950.5	916.0	878.4	839.9	804.7	774.2	755.1	736.9	728.4	718.7
10°	932.4	907.3	853.5	798.1	742.8	689.6	639.6	604.2	572.8	555.2	542.8
12.5°	902.3	867.9	793.4	718.5	642.6	566.9	492.0	433.1	383.9	358.0	344.7
15°	873.1	831.6	736.3	641.2	543.8	440.8	342.3	275.5	234.8	218.6	213.1
17.5°	846.6	793.4	679.0	563.3	441.8	317.2	230.1	193.3	177.7	172.4	170.6
20°	817.9	754.9	619.5	481.9	335.4	221.8	179.7	163.5	157.1	155.6	154.8
22.5°	790.2	716.9	562.5	394.7	240.9	171.2	154.4	147.7	146.7	148.0	148.0
25°	766.7	682.9	501.1	303.6	176.9	144.1	138.2	136.6	140.3	145.5	146.5
27.5°	749.1	655.0	435.6	224.1	140.9	125.3	125.1	127.7	137.0	146.9	148.8
30°	737.1	628.6	365.7	161.7	118.2	110.3	113.5	119.0	132.6	146.7	150.4
32.5°	730.9	609.0	292.7	125.1	101.2	96.9	102.2	108.9	122.4	135.4	140.3
35°	735.7	594.6	223.9	104.4	89.3	86.0	91.5	98.0	105.9	111.5	115.2
37.5°	753.5	588.8	169.0	93.5	81.2	78.1	82.4	86.2	89.3	90.9	92.7
40°	791.8	595.0	135.4	88.0	76.7	72.7	74.5	75.9	77.9	79.5	80.2
42.5°	848.4	613.3	121.4	85.8	74.3	68.6	68.2	68.8	71.4	74.3	74.9
45°	927.4	645.8	120.4	87.2	73.1	65.2	63.4	64.2	68.2	72.7	73.5
47.5°	1028.4	695.2	128.3	91.3	74.1	63.4	60.5	61.5	66.4	72.5	73.5
50°	1150.8	764.1	141.5	97.4	78.5	63.8	59.5	60.1	65.2	71.9	72.9
52.5°	1295.3	862.0	156.0	103.4	83.0	66.4	60.3	58.9	63.6	69.6	70.8
55°	1456.0	987.5	170.8	108.7	85.4	69.6	61.9	57.3	60.7	65.6	66.6
57.5°	1653.2	1163.0	196.5	113.9	87.0	71.8	63.4	55.7	56.9	60.5	61.3
60°	1920.3	1411.3	241.7	122.4	90.5	72.5	63.3	54.4	53.2	55.1	55.5
62.5°	2240.3	1680.9	279.5	133.0	96.5	73.1	62.1	53.4	50.0	50.0	50.4
65°	2430.2	1753.0	258.5	141.9	101.4	72.5	60.7	52.4	47.6	45.5	45.7
67.5°	2269.1	1541.7	221.6	143.7	101.2	69.8	58.5	50.6	45.3	41.9	41.7
69°	2067.3	1330.2	205.0	139.0	96.5	66.2	55.7	48.6	43.5	39.9	39.7
70°	1904.6	1201.2	194.1	133.8	91.3	63.6	53.6	46.8	42.1	38.7	38.3
72.5°	1384.8	787.1	165.8	115.0	75.3	53.4	46.3	41.1	37.6	35.6	35.2
75°	692.0	375.4	134.6	93.3	57.7	42.7	38.0	34.4	32.6	32.2	32.0
77.5°	227.3	172.0	96.3	69.6	42.9	33.4	30.6	28.1	27.7	28.9	28.5
80°	124.9	100.0	61.1	46.1	29.3	24.5	24.1	22.7	23.3	25.3	24.9
82.5°	63.6	52.0	37.8	27.7	19.8	17.6	19.2	18.4	19.2	21.0	20.8
85°	31.4	28.5	23.9	16.8	13.0	11.3	13.6	14.2	14.6	16.0	16.0
87.5°	18.2	16.8	12.7	7.9	6.5	5.9	7.9	7.7	9.1	9.9	9.7
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)