

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: P299818

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299818
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
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Medium OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6211.3 lumens
Efficiency: N/A
Efficacy: 105.3 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 - G2

Input Watts (W): 59
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

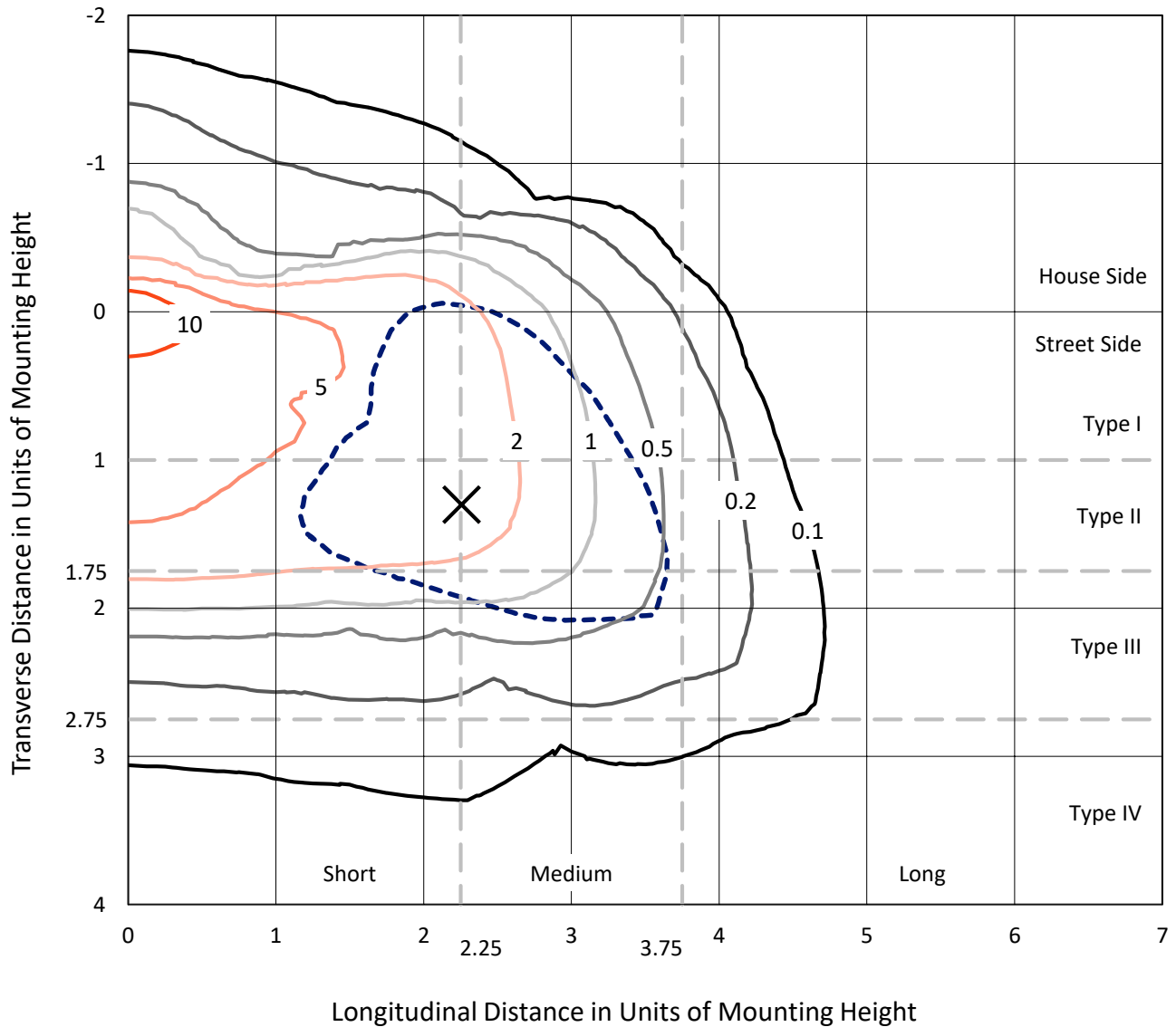


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

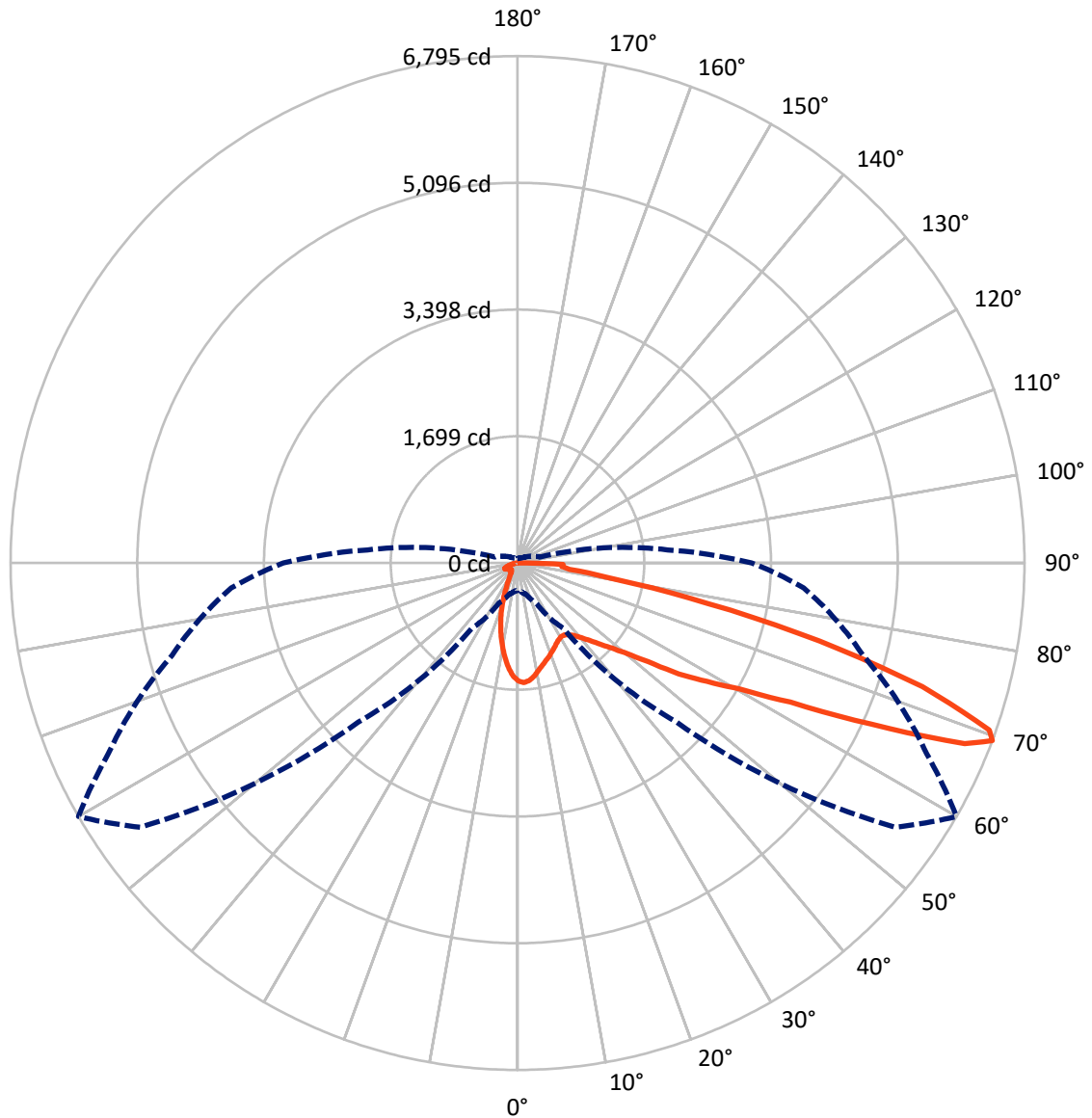


Based on 10 foot mounting height. Maximum calculated value = 15.8 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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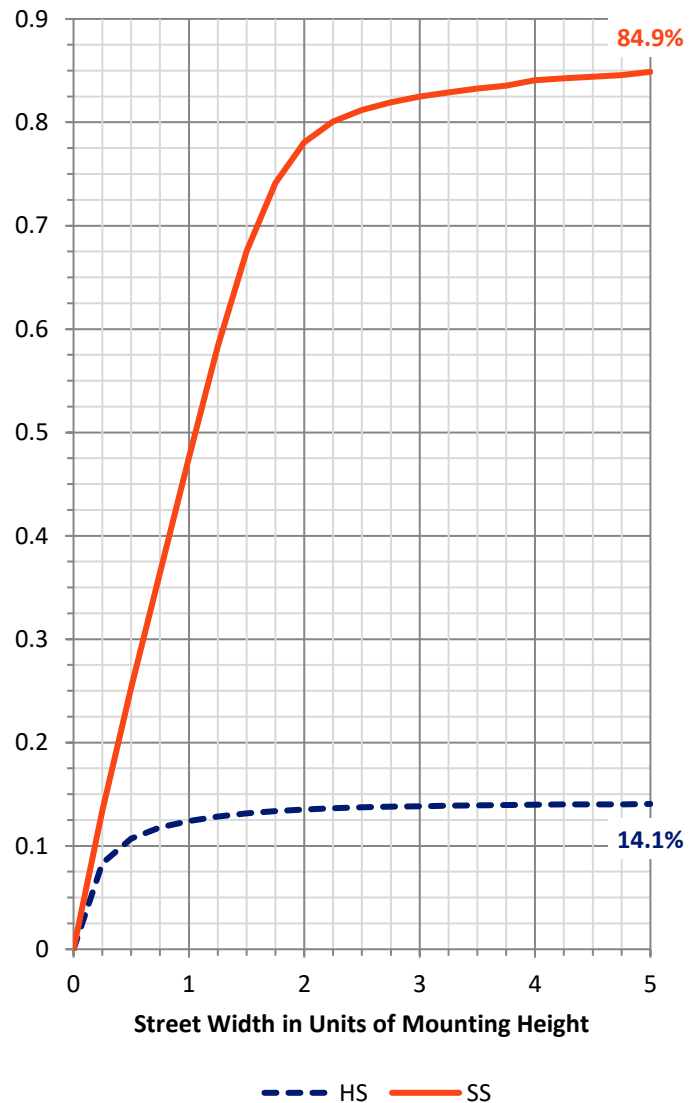
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	883.6	0.0	883.6
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	5327.6	0.0	5327.6
	% Fixture	85.8	0.0	85.8
Total	Lumens	6211.3	0.0	6211.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.8	2.2
10°-20°	285.1	4.6
20°-30°	363.3	5.8
30°-40°	499.4	8.0
40°-50°	810.4	13.0
50°-60°	1299.7	20.9
60°-70°	1729.8	27.8
70°-80°	933.9	15.0
80°-90°	155.8	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°	6211.3	100.0
0°-180°	6211.3	100.0

Coefficient of Utilization



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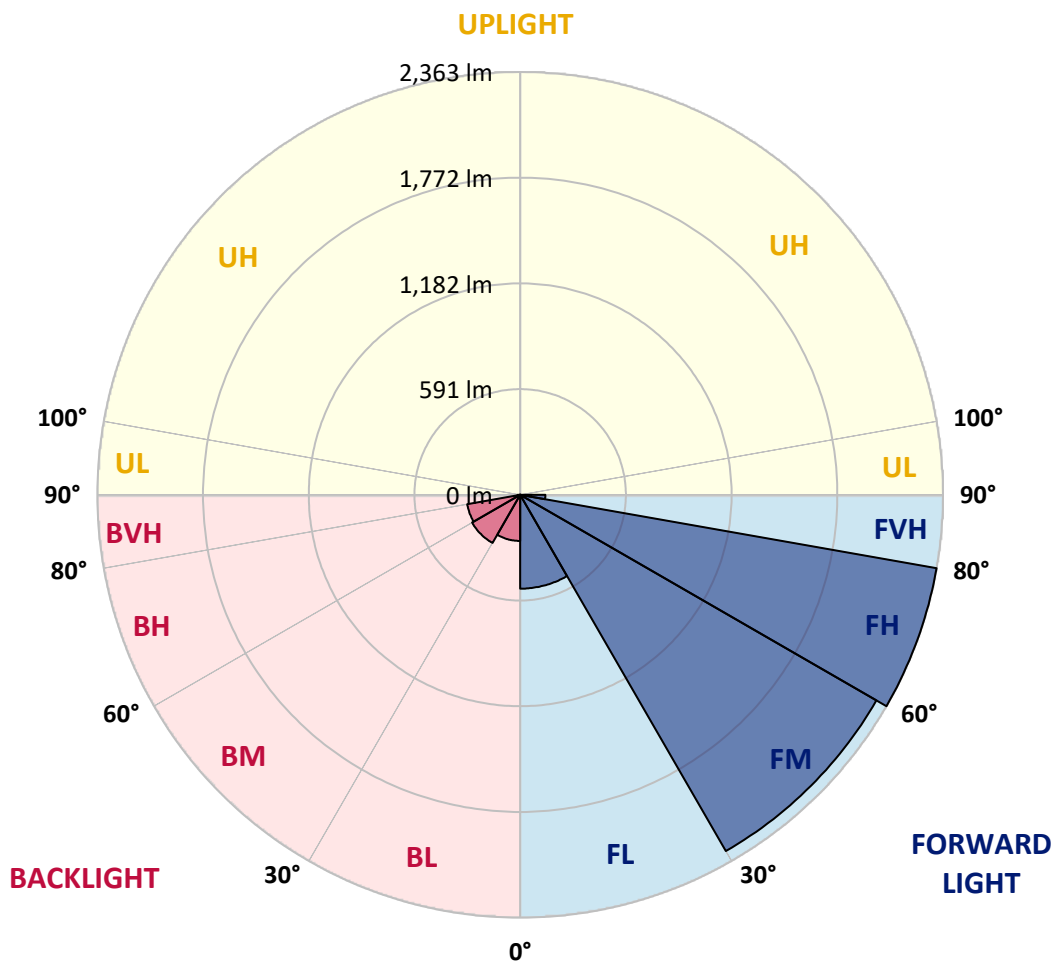
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	524.5	8.4			
FM	(30°-60°)	2299.1	37.0			
FH	(60°-80°)	2363.3	38.0			G2/5000
FVH	(80°-90°)	140.8	2.3			G2/225
BL	(0°-30°)	257.8	4.2	B1/500		
BM	(30°-60°)	310.4	5.0	B1/1000		
BH	(60°-80°)	300.4	4.8	B1/500		G1/500
BVH	(80°-90°)	15.0	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	1582.7	1582.7	1582.7	1582.7	1582.7	1582.7	1582.7	1582.7	1582.7	1582.7	1582.7
2.5°	1615.1	1618.7	1617.2	1616.3	1619.0	1614.8	1606.1	1603.4	1599.2	1589.3	1572.5
5°	1554.5	1565.3	1564.7	1572.8	1586.3	1589.9	1586.0	1586.6	1578.8	1566.5	1538.6
7.5°	1449.8	1454.3	1456.7	1474.4	1499.0	1518.8	1535.6	1541.0	1537.4	1526.9	1490.9
10°	1341.8	1345.4	1351.1	1371.8	1403.0	1430.3	1462.1	1480.4	1488.2	1486.4	1446.2
12.5°	1249.1	1252.7	1260.2	1283.6	1320.8	1354.4	1400.6	1423.4	1442.0	1453.1	1409.9
15°	1166.0	1173.8	1181.0	1208.0	1249.7	1293.8	1346.0	1374.8	1403.6	1428.5	1377.8
17.5°	1101.2	1109.0	1113.2	1137.8	1182.2	1236.2	1297.4	1331.3	1367.3	1408.1	1346.0
20°	1063.7	1067.3	1065.5	1079.3	1119.2	1176.5	1249.1	1288.4	1331.9	1388.9	1314.2
22.5°	1053.2	1053.5	1046.9	1045.4	1071.2	1119.5	1197.5	1245.2	1298.6	1376.3	1286.9
25°	1078.7	1077.8	1059.8	1045.1	1047.8	1076.0	1147.7	1203.2	1270.7	1373.6	1265.9
27.5°	1135.4	1138.1	1111.4	1083.8	1056.5	1055.6	1109.9	1168.4	1247.9	1385.9	1256.9
30°	1214.9	1219.4	1190.9	1155.8	1104.5	1062.2	1095.2	1147.7	1233.8	1411.4	1255.4
32.5°	1301.9	1306.7	1285.1	1248.2	1181.0	1103.0	1105.4	1149.5	1233.2	1447.1	1265.6
35°	1394.6	1400.0	1388.9	1357.7	1283.0	1178.3	1144.4	1178.6	1252.7	1501.7	1292.9
37.5°	1498.1	1506.5	1509.5	1479.8	1400.0	1277.6	1208.3	1233.8	1296.8	1577.6	1343.0
40°	1647.2	1658.9	1658.0	1615.4	1534.1	1411.7	1307.0	1313.6	1365.5	1679.1	1423.1
42.5°	1932.9	1935.3	1860.6	1767.9	1681.8	1552.7	1423.4	1418.0	1460.3	1807.5	1541.0
45°	2296.2	2286.3	2120.1	1941.0	1836.0	1714.8	1574.9	1548.5	1580.6	1964.1	1688.7
47.5°	2597.8	2575.0	2365.0	2117.7	1999.2	1890.9	1752.9	1706.7	1724.4	2141.7	1879.5
50°	2702.5	2685.4	2511.4	2264.7	2153.7	2105.7	1971.9	1906.5	1911.3	2353.6	2103.0
52.5°	2680.0	2677.6	2561.5	2361.7	2298.3	2331.3	2282.1	2193.6	2146.8	2588.8	2344.3
55°	2626.9	2632.0	2590.0	2474.5	2463.7	2549.2	2687.5	2622.1	2476.6	2826.1	2593.6
57.5°	2442.4	2455.6	2548.0	2616.4	2729.8	2857.0	3014.0	2995.3	2831.5	3082.7	2890.0
60°	1967.7	1998.3	2246.1	2588.8	3003.7	3401.6	3471.8	3428.6	3197.6	3401.0	3281.6
62.5°	1378.7	1410.5	1705.2	2241.3	2958.7	4016.7	4290.3	4104.0	3723.3	3870.0	3788.4
65°	738.1	753.4	978.4	1555.1	2497.9	4143.6	5486.6	5203.1	4555.6	4448.2	4221.9
67.5°	407.2	415.6	501.7	785.2	1599.8	3648.8	6248.7	6463.0	5595.8	4833.1	4143.0
69°	368.2	376.0	432.4	594.7	1070.6	3017.0	6174.3	6795.1	6051.9	4795.0	3851.4
70°	360.1	367.3	418.0	548.2	866.5	2486.8	5925.0	6710.2	6160.5	4658.5	3596.9
72.5°	324.0	331.8	381.1	492.4	740.5	1239.8	4693.3	5673.5	5593.1	4039.2	2728.3
75°	302.1	309.3	392.8	482.2	709.0	784.6	3094.1	4181.4	4111.5	2825.5	1471.1
77.5°	129.3	128.7	182.1	408.1	719.5	759.7	1662.5	2612.2	2383.3	1207.7	422.5
80°	86.4	84.9	86.4	120.0	659.8	763.9	871.0	1325.9	1001.5	307.8	208.2
82.5°	74.4	73.2	75.9	73.2	231.9	871.9	740.5	705.1	476.2	174.9	103.2
85°	50.1	48.0	65.4	65.7	109.5	774.7	834.1	595.6	385.3	103.8	51.0
87.5°	24.0	23.4	38.1	46.5	64.2	314.7	935.8	610.3	388.6	53.1	24.3
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°	1582.7	1582.7	1582.7	1582.7	1582.7	1582.7	1582.7	1582.7	1582.7	1582.7	1582.7
2.5°	1567.4	1555.1	1543.1	1528.7	1513.7	1496.9	1488.5	1480.1	1478.0	1475.6	1467.2
5°	1524.2	1506.8	1476.8	1443.8	1409.0	1375.1	1349.3	1333.1	1320.8	1314.5	1303.4
7.5°	1468.4	1442.9	1390.4	1333.4	1274.9	1221.5	1175.3	1146.2	1118.6	1105.7	1091.0
10°	1415.3	1377.2	1295.6	1211.6	1127.6	1046.9	970.9	917.2	869.5	842.8	823.9
12.5°	1369.7	1317.5	1204.4	1090.7	975.4	860.5	746.8	657.4	582.7	543.4	523.3
15°	1325.3	1262.3	1117.7	973.3	825.4	669.1	519.7	418.3	356.5	331.8	323.4
17.5°	1285.1	1204.4	1030.7	855.1	670.6	481.6	349.3	293.4	269.7	261.6	258.9
20°	1241.6	1145.9	940.3	731.5	509.2	336.7	272.7	248.1	238.5	236.1	234.9
22.5°	1199.6	1088.3	853.9	599.2	365.8	259.8	234.3	224.1	222.6	224.7	224.7
25°	1163.9	1036.7	760.6	460.9	268.5	218.7	209.7	207.3	213.0	220.8	222.3
27.5°	1137.2	994.3	661.3	340.3	213.9	190.2	189.9	193.8	207.9	222.9	225.9
30°	1118.9	954.1	555.1	245.4	179.4	167.4	172.2	180.6	201.3	222.6	228.3
32.5°	1109.6	924.4	444.4	189.9	153.6	147.0	155.1	165.3	185.7	205.5	213.0
35°	1116.8	902.5	340.0	158.4	135.6	130.5	138.9	148.8	160.8	169.2	174.9
37.5°	1143.8	893.8	256.5	141.9	123.3	118.5	125.1	130.8	135.6	138.0	140.7
40°	1202.0	903.1	205.5	133.5	116.4	110.4	113.1	115.2	118.2	120.6	121.8
42.5°	1287.8	931.0	184.2	130.2	112.8	104.1	103.5	104.4	108.3	112.8	113.7
45°	1407.8	980.2	182.7	132.3	111.0	99.0	96.3	97.5	103.5	110.4	111.6
47.5°	1561.1	1055.3	194.7	138.6	112.5	96.3	91.8	93.3	100.8	110.1	111.6
50°	1746.9	1160.0	214.8	147.9	119.1	96.9	90.3	91.2	99.0	109.2	110.7
52.5°	1966.2	1308.5	236.7	156.9	126.0	100.8	91.5	89.4	96.6	105.6	107.4
55°	2210.1	1499.0	259.2	165.0	129.6	105.6	93.9	87.0	92.1	99.6	101.1
57.5°	2509.6	1765.5	298.2	172.8	132.0	108.9	96.3	84.6	86.4	91.8	93.0
60°	2914.9	2142.3	367.0	185.7	137.4	110.1	96.0	82.5	80.7	83.7	84.3
62.5°	3400.7	2551.6	424.3	201.9	146.4	111.0	94.2	81.0	75.9	75.9	76.5
65°	3689.1	2661.1	392.5	215.4	153.9	110.1	92.1	79.5	72.3	69.0	69.3
67.5°	3444.5	2340.4	336.4	218.1	153.6	105.9	88.8	76.8	68.7	63.6	63.3
69°	3138.2	2019.3	311.1	210.9	146.4	100.5	84.6	73.8	66.0	60.6	60.3
70°	2891.2	1823.4	294.6	203.1	138.6	96.6	81.3	71.1	63.9	58.8	58.2
72.5°	2102.1	1194.8	251.7	174.6	114.3	81.0	70.2	62.4	57.0	54.0	53.4
75°	1050.5	569.8	204.3	141.6	87.6	64.8	57.6	52.2	49.5	48.9	48.6
77.5°	345.1	261.0	146.1	105.6	65.1	50.7	46.5	42.6	42.0	43.8	43.2
80°	189.6	151.8	92.7	69.9	44.4	37.2	36.6	34.5	35.4	38.4	37.8
82.5°	96.6	78.9	57.3	42.0	30.0	26.7	29.1	27.9	29.1	31.8	31.5
85°	47.7	43.2	36.3	25.5	19.8	17.1	20.7	21.6	22.2	24.3	24.3
87.5°	27.6	25.5	19.2	12.0	9.9	9.0	12.0	11.7	13.8	15.0	14.7
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)