

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: P300415

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300415
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
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-AFL-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3647.1 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

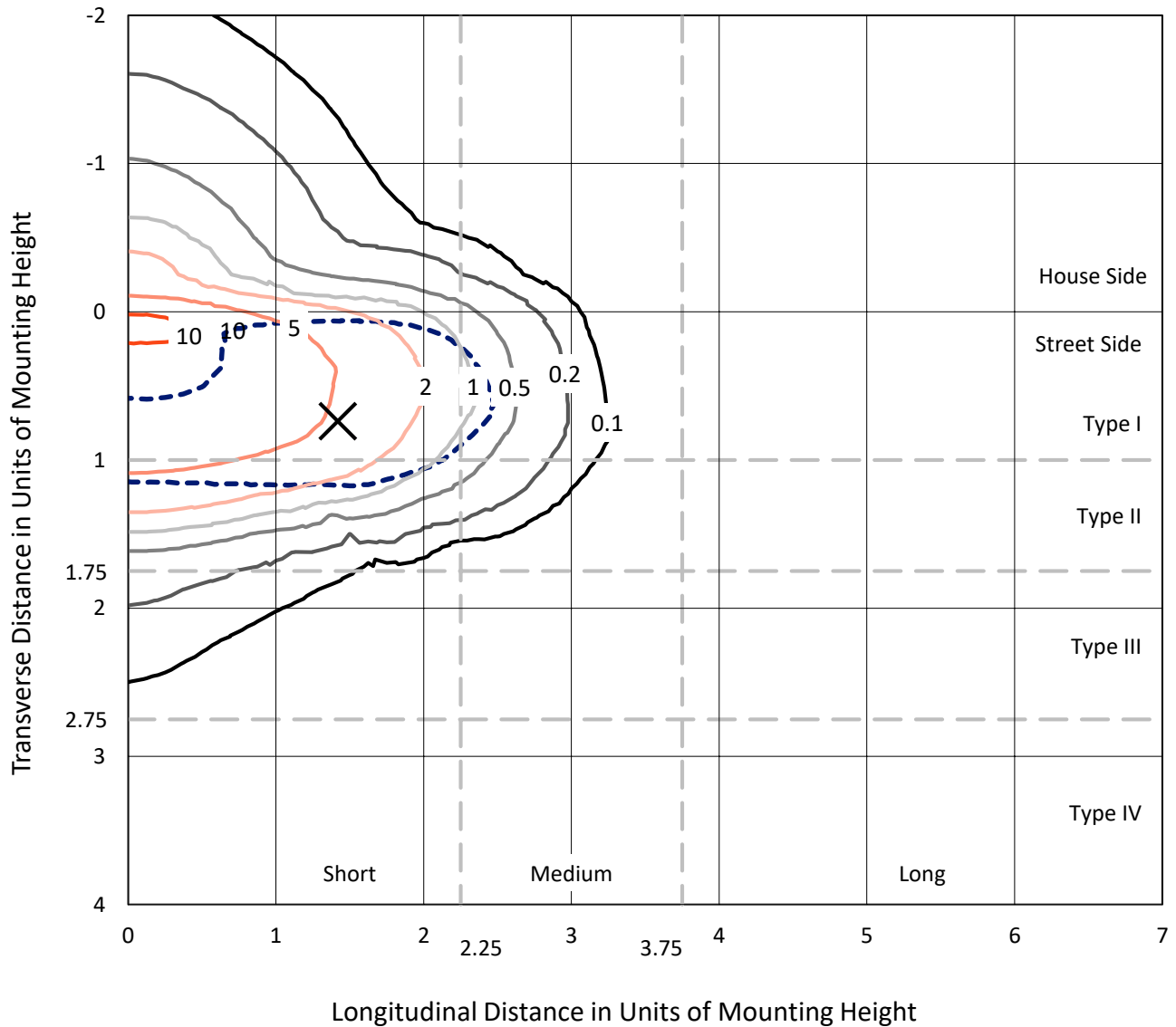
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

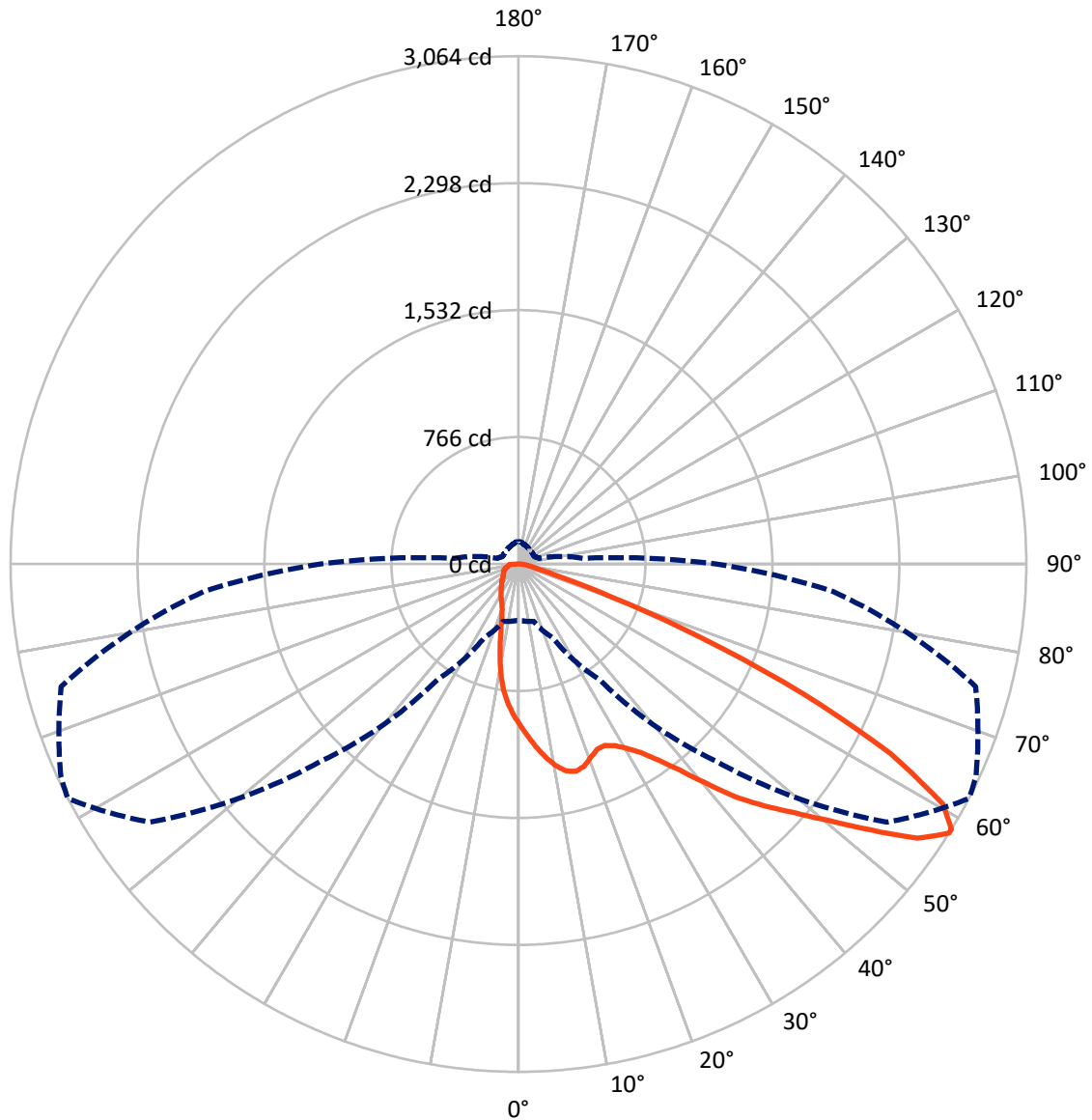
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.8 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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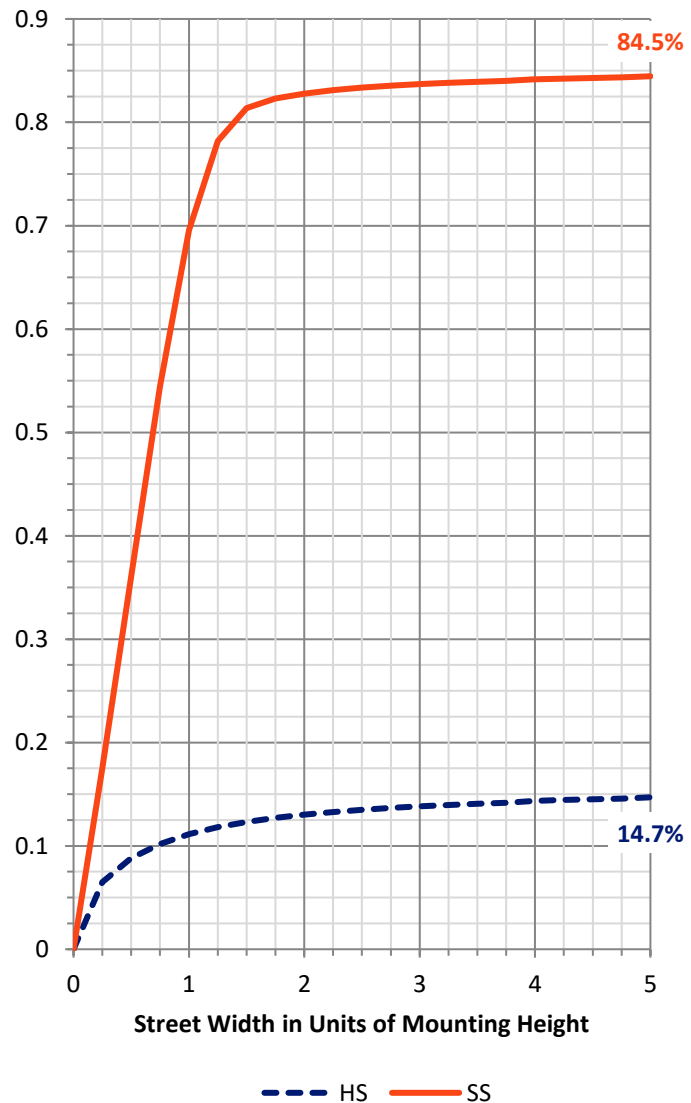
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	556.2	0.0	556.2
	% Fixture	15.3	0.0	15.3
Street Side	Lumens	3090.9	0.0	3090.9
	% Fixture	84.7	0.0	84.7
Total	Lumens	3647.1	0.0	3647.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.6	2.4
10°-20°	221.5	6.1
20°-30°	358.0	9.8
30°-40°	568.4	15.6
40°-50°	831.6	22.8
50°-60°	869.8	23.8
60°-70°	513.9	14.1
70°-80°	144.8	4.0
80°-90°	52.6	1.4
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°	3647.1	100.0
0°-180°	3647.1	100.0



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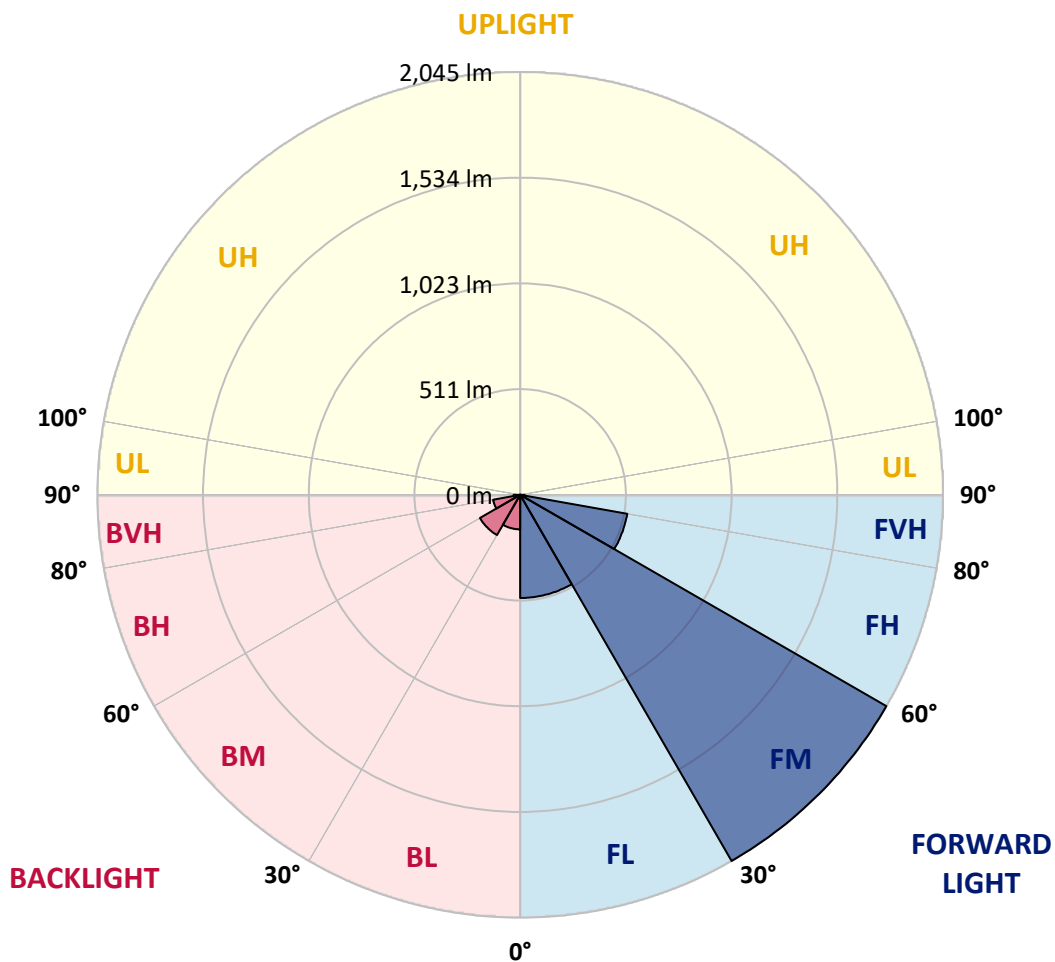
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	499.0	13.7			
FM	(30°-60°)	2045.3	56.1			
FH	(60°-80°)	525.9	14.4			G0/660
FVH	(80°-90°)	20.7	0.6			G1/100
BL	(0°-30°)	167.2	4.6	B1/500		
BM	(30°-60°)	224.5	6.2	B1/1000		
BH	(60°-80°)	132.7	3.6	B1/500		G1/500
BVH	(80°-90°)	31.8	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	968.8	968.8	968.8	968.8	968.8	968.8	968.8	968.8	968.8	968.8	968.8
2.5°	1107.0	1098.1	1092.4	1087.5	1080.9	1067.0	1048.3	1036.4	1030.4	1010.0	985.8
5°	1215.6	1207.7	1201.8	1195.1	1183.5	1161.6	1131.4	1107.4	1095.5	1054.6	1006.2
7.5°	1190.2	1193.4	1203.5	1221.2	1236.3	1233.4	1206.5	1175.9	1160.3	1103.4	1029.9
10°	1037.0	1042.6	1060.1	1101.5	1168.5	1237.2	1258.2	1237.0	1221.2	1151.7	1054.3
12.5°	1006.2	1006.0	1007.4	1018.4	1058.3	1154.9	1259.9	1281.2	1271.7	1197.7	1079.2
15°	1018.8	1019.1	1018.1	1022.7	1035.1	1073.4	1207.3	1298.2	1304.9	1244.1	1105.0
17.5°	1051.7	1050.9	1046.9	1046.9	1051.4	1066.3	1145.5	1282.4	1313.3	1285.1	1127.6
20°	1107.0	1103.1	1092.6	1083.0	1078.2	1086.2	1120.1	1246.0	1298.7	1321.0	1146.4
22.5°	1174.0	1170.9	1153.9	1133.3	1116.6	1116.5	1133.1	1214.2	1273.4	1354.8	1162.2
25°	1260.6	1255.6	1230.3	1197.4	1168.2	1157.0	1161.6	1212.6	1259.7	1391.6	1176.2
27.5°	1362.2	1353.1	1323.2	1275.7	1232.7	1210.2	1203.5	1240.6	1272.2	1437.1	1195.8
30°	1485.5	1475.1	1436.8	1374.8	1314.1	1277.2	1263.0	1290.3	1313.8	1492.6	1227.2
32.5°	1625.9	1610.7	1566.4	1498.1	1418.4	1362.1	1338.9	1355.9	1374.6	1559.4	1266.6
35°	1819.7	1801.7	1737.7	1643.4	1553.4	1475.9	1438.8	1451.2	1469.4	1659.0	1323.4
37.5°	1952.0	1943.9	1901.3	1812.7	1714.8	1625.7	1568.3	1575.5	1585.8	1783.5	1396.2
40°	1950.8	1954.0	1954.9	1955.8	1889.1	1803.8	1742.1	1734.6	1732.5	1920.2	1479.0
42.5°	1853.1	1866.5	1909.7	1997.5	2038.0	1998.9	1942.4	1920.6	1909.7	2081.3	1566.8
45°	1703.5	1710.7	1791.8	1963.1	2114.3	2192.1	2149.3	2080.6	2061.0	2229.3	1639.6
47.5°	1626.4	1634.3	1685.3	1872.1	2113.4	2348.2	2372.9	2242.1	2207.0	2358.1	1702.4
50°	1442.8	1459.3	1523.5	1713.8	2036.3	2420.0	2606.7	2434.4	2361.9	2483.5	1765.5
52.5°	1105.7	1131.1	1203.0	1453.4	1840.7	2384.4	2793.7	2667.6	2565.3	2613.4	1819.6
55°	697.4	716.3	776.8	1026.5	1472.5	2199.5	2864.6	2919.9	2828.9	2736.3	1866.5
57.5°	379.2	387.6	410.3	566.7	957.8	1790.6	2761.2	3063.5	3025.7	2840.7	1901.8
58°	339.4	345.0	359.1	491.2	849.4	1678.7	2715.4	3064.0	3045.1	2856.0	1904.6
60°	251.8	248.8	236.3	280.3	472.8	1159.8	2438.2	2941.4	2996.8	2874.7	1891.2
62.5°	221.2	214.2	188.6	185.6	230.0	534.3	1865.6	2519.6	2650.6	2767.9	1809.8
65°	207.8	200.2	167.3	156.6	165.9	226.0	1099.0	1889.6	2054.0	2444.0	1601.6
67.5°	197.8	188.1	153.7	139.1	139.8	149.4	440.5	1190.2	1375.1	1855.6	1245.8
70°	188.2	177.6	142.2	125.4	121.4	118.2	175.2	595.8	763.6	1172.1	794.3
72.5°	177.9	167.4	132.1	114.5	106.8	96.0	114.4	243.7	340.4	554.5	360.3
75°	163.0	153.5	121.9	104.9	93.9	79.5	86.4	127.3	152.7	220.9	173.6
77.5°	144.6	136.9	110.6	97.0	83.3	64.6	66.5	88.3	97.9	126.4	103.2
80°	103.9	106.6	98.4	87.2	74.2	52.4	51.0	64.4	69.6	81.2	67.1
82.5°	73.0	74.5	81.4	71.3	61.3	41.2	37.6	45.3	48.4	53.4	36.2
85°	50.3	48.6	55.8	49.6	44.3	27.5	25.8	30.7	32.6	33.1	18.7
87.5°	30.2	30.2	32.3	26.6	23.9	14.3	13.9	17.5	18.7	17.9	10.3
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°	968.8	968.8	968.8	968.8	968.8	968.8	968.8	968.8	968.8	968.8	968.8
2.5°	971.4	959.2	933.2	912.4	886.2	858.9	843.6	827.3	816.1	808.0	820.9
5°	978.7	953.8	900.3	849.4	793.3	734.9	690.6	649.3	620.7	602.8	619.6
7.5°	990.4	952.1	866.8	779.9	679.1	581.9	495.0	440.5	408.7	393.1	402.9
10°	1003.8	949.4	827.4	685.6	541.3	418.9	354.0	332.0	324.8	321.8	323.2
12.5°	1015.0	943.5	779.2	571.5	406.5	330.8	312.0	311.5	313.1	313.4	313.9
15°	1022.9	934.9	707.6	452.7	325.1	301.4	300.4	303.5	306.4	307.6	308.3
17.5°	1028.2	917.3	626.7	357.9	291.3	287.1	289.6	293.5	296.6	297.5	298.1
20°	1027.7	891.3	530.3	298.5	272.9	272.9	277.0	280.1	280.3	279.2	279.8
22.5°	1022.4	855.8	436.9	266.9	256.6	259.5	263.6	260.7	248.7	240.8	241.3
25°	1013.4	813.4	356.9	246.8	241.5	246.6	245.4	223.4	206.3	198.5	198.5
27.5°	1005.5	763.2	295.4	229.3	226.4	232.7	211.4	191.5	184.3	180.7	179.5
30°	999.9	709.1	254.3	212.4	212.1	207.5	183.4	177.9	176.7	173.8	172.8
32.5°	1001.2	654.3	228.1	197.7	198.9	177.6	170.0	171.2	170.2	167.1	165.7
35°	1012.6	602.3	210.9	184.3	180.7	160.4	162.1	164.4	164.0	159.7	158.3
37.5°	1032.8	553.0	199.6	173.1	157.7	151.8	154.6	158.0	157.1	154.2	153.2
40°	1054.1	506.6	190.3	164.4	144.1	146.0	148.4	150.3	151.1	152.0	151.3
42.5°	1074.9	458.2	179.0	155.4	138.4	140.5	141.5	143.4	148.0	151.3	151.1
45°	1087.3	412.7	167.3	142.7	134.0	135.2	134.5	138.2	143.9	149.2	149.4
47.5°	1101.0	377.3	158.0	131.0	129.7	130.5	128.5	132.2	137.4	143.9	144.6
50°	1117.7	356.2	150.6	121.8	123.8	123.8	123.3	126.7	134.0	141.5	142.9
52.5°	1136.6	352.1	144.4	115.1	118.0	117.8	118.3	123.5	131.4	138.8	140.0
55°	1159.6	363.2	137.7	110.1	112.3	113.0	114.7	120.6	127.3	135.7	136.2
57.5°	1186.4	385.9	132.4	106.1	107.2	109.4	112.1	117.5	124.7	134.0	134.5
58°	1190.8	390.7	131.6	105.8	106.1	108.7	111.8	117.0	124.2	134.3	134.8
60°	1191.0	406.7	129.7	104.2	102.2	106.5	109.9	115.1	123.3	135.5	136.7
62.5°	1148.8	406.5	128.3	102.0	98.1	103.4	107.3	113.3	122.4	138.4	140.8
65°	1011.5	369.4	121.8	98.6	94.8	100.6	105.1	112.1	124.9	151.1	152.7
67.5°	791.2	302.8	109.6	93.8	90.5	97.9	103.7	112.0	127.4	154.0	155.1
70°	523.1	226.5	96.2	88.3	86.0	94.6	104.4	117.8	124.5	147.9	145.1
72.5°	271.5	159.0	85.4	81.4	80.9	91.7	114.4	117.1	121.6	139.1	135.7
75°	142.5	110.4	75.9	73.8	74.7	91.0	135.0	114.0	117.8	133.1	139.6
77.5°	87.2	89.1	67.8	67.0	68.7	89.0	134.8	110.1	112.3	122.4	129.7
80°	58.4	72.3	61.7	61.8	63.0	81.4	121.1	103.9	105.6	115.8	123.1
82.5°	36.9	42.8	56.0	58.9	57.4	67.1	102.9	94.6	97.0	132.4	140.0
85°	18.7	26.8	48.6	56.7	51.7	47.1	83.5	82.9	84.2	95.5	99.8
87.5°	8.6	14.8	38.0	49.5	39.0	29.4	60.6	61.5	66.3	67.8	67.8
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)