

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: P300355

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300355  
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-7027-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

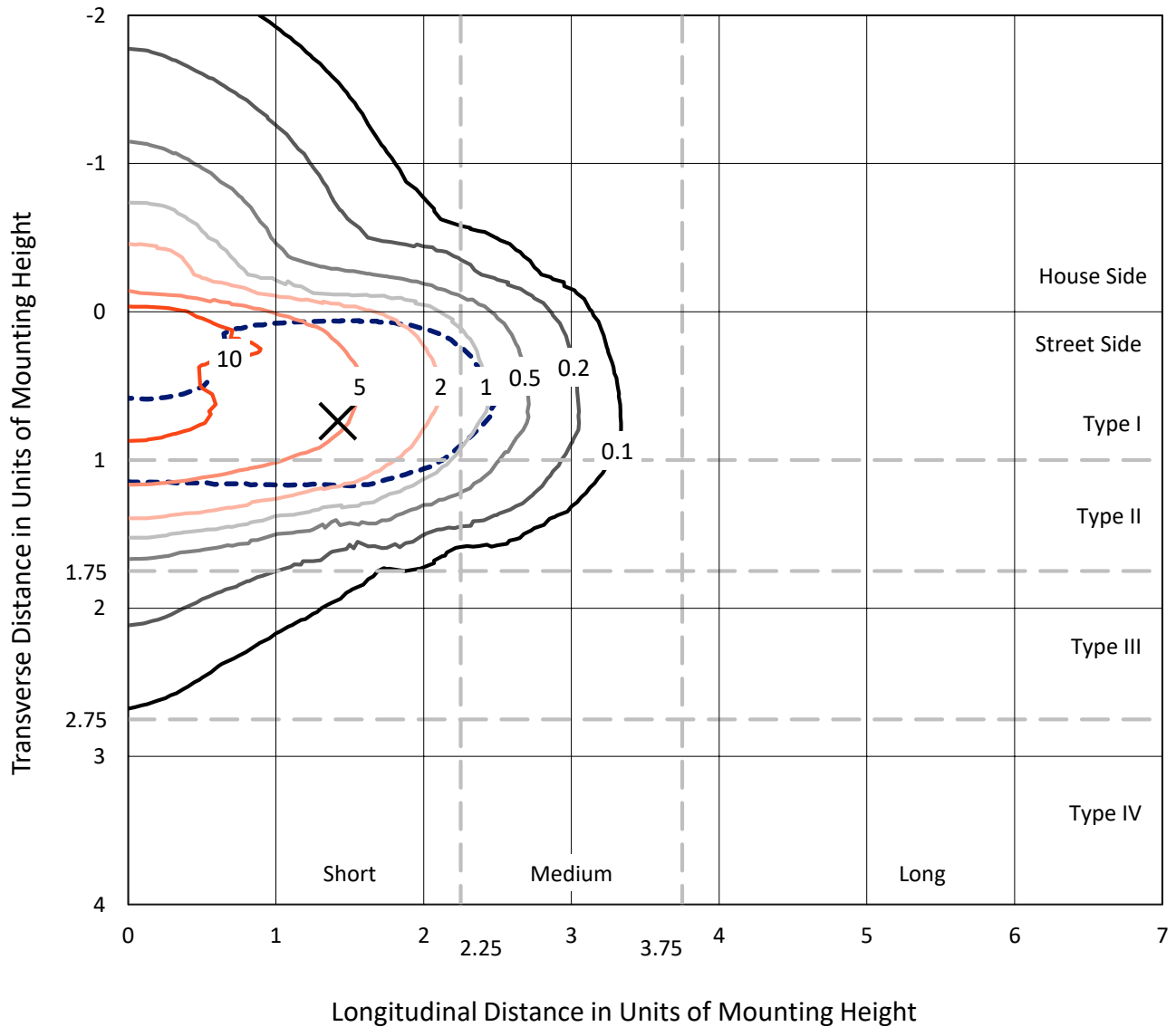
Lumens per Lamp: N/A  
Luminaire Lumens: 4472.7 lumens  
Efficiency: N/A  
Efficacy: 101.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (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

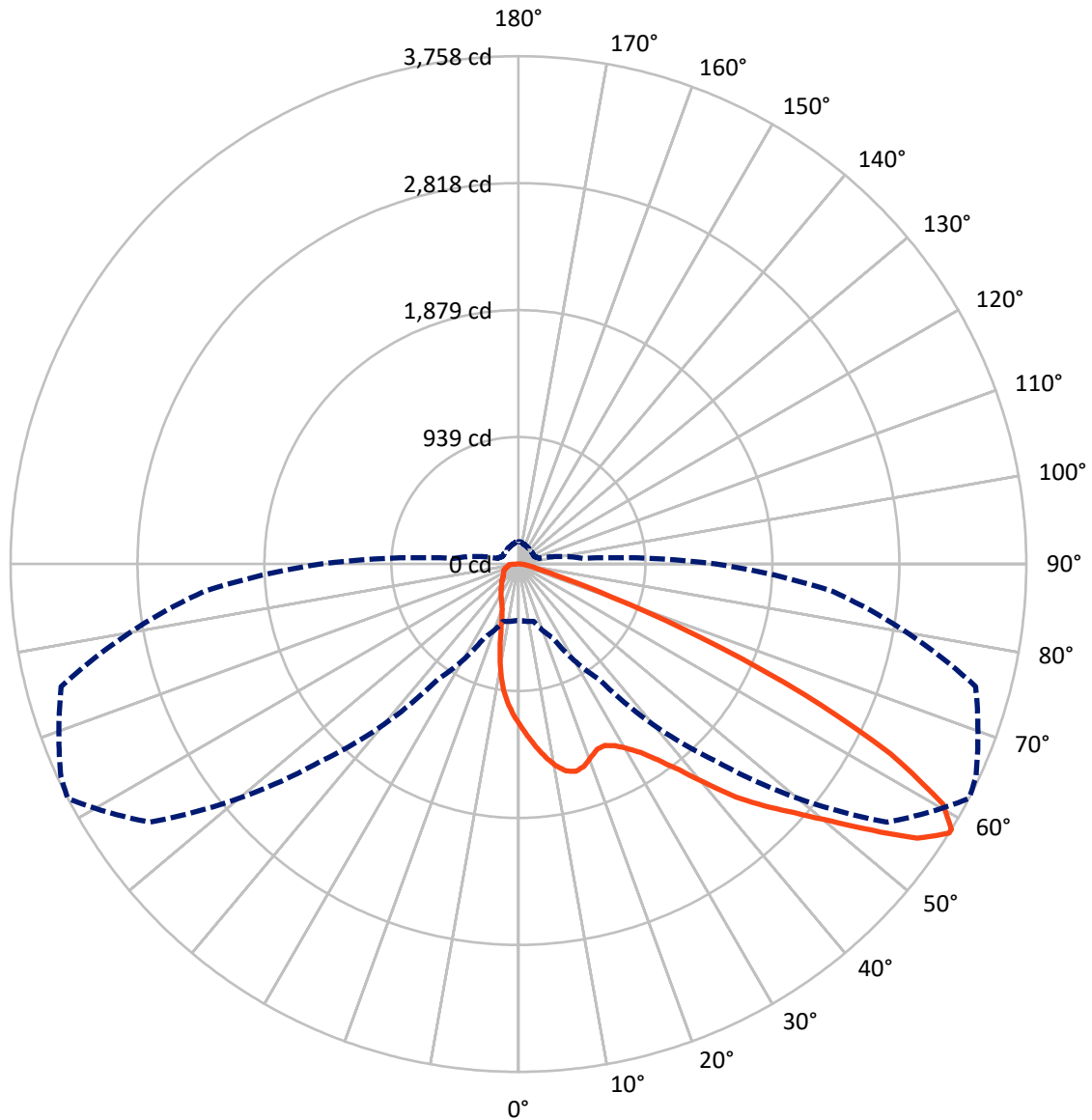
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.5 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P300355  
CATALOG NUMBER: GLNA-AF-01-LED-E1-AFL-7027-800

### Luminous Intensity Polar Plot



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

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CATALOG NUMBER: GLNA-AF-01-LED-E1-AFL-7027-800

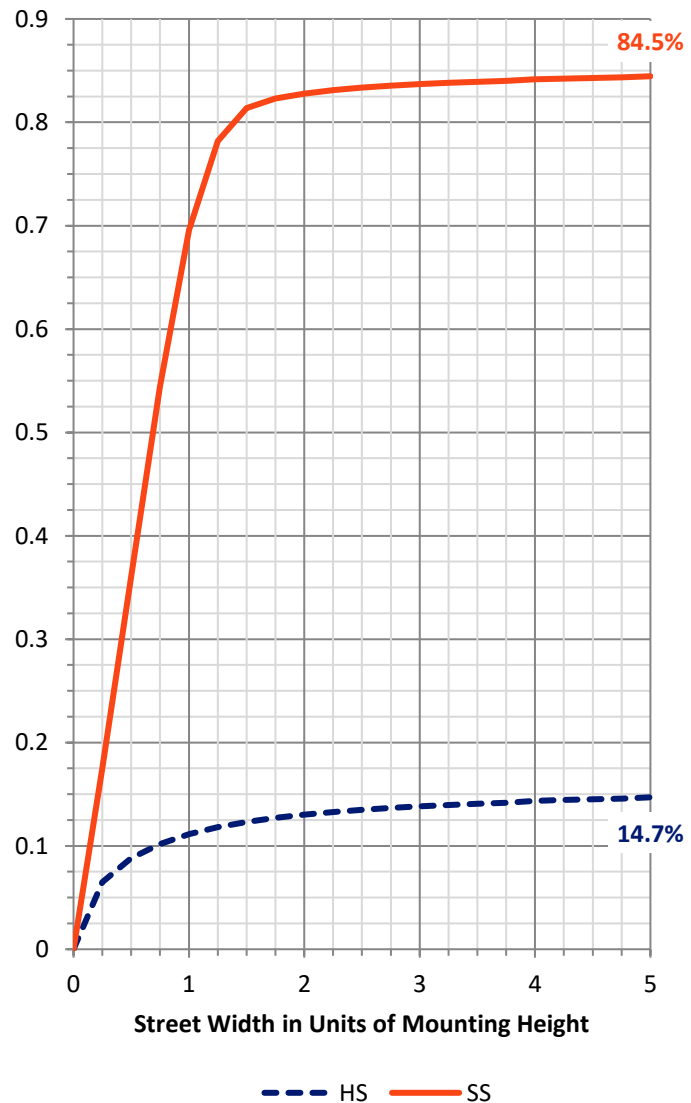
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	682.1	0.0	682.1
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	3790.6	0.0	3790.6
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	4472.7	0.0	4472.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.3	2.4
10°-20°	271.6	6.1
20°-30°	439.1	9.8
30°-40°	697.0	15.6
40°-50°	1019.9	22.8
50°-60°	1066.7	23.8
60°-70°	630.2	14.1
70°-80°	177.5	4.0
80°-90°	64.4	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°	4472.7	100.0
0°-180°	4472.7	100.0



REPORT NUMBER: P300355

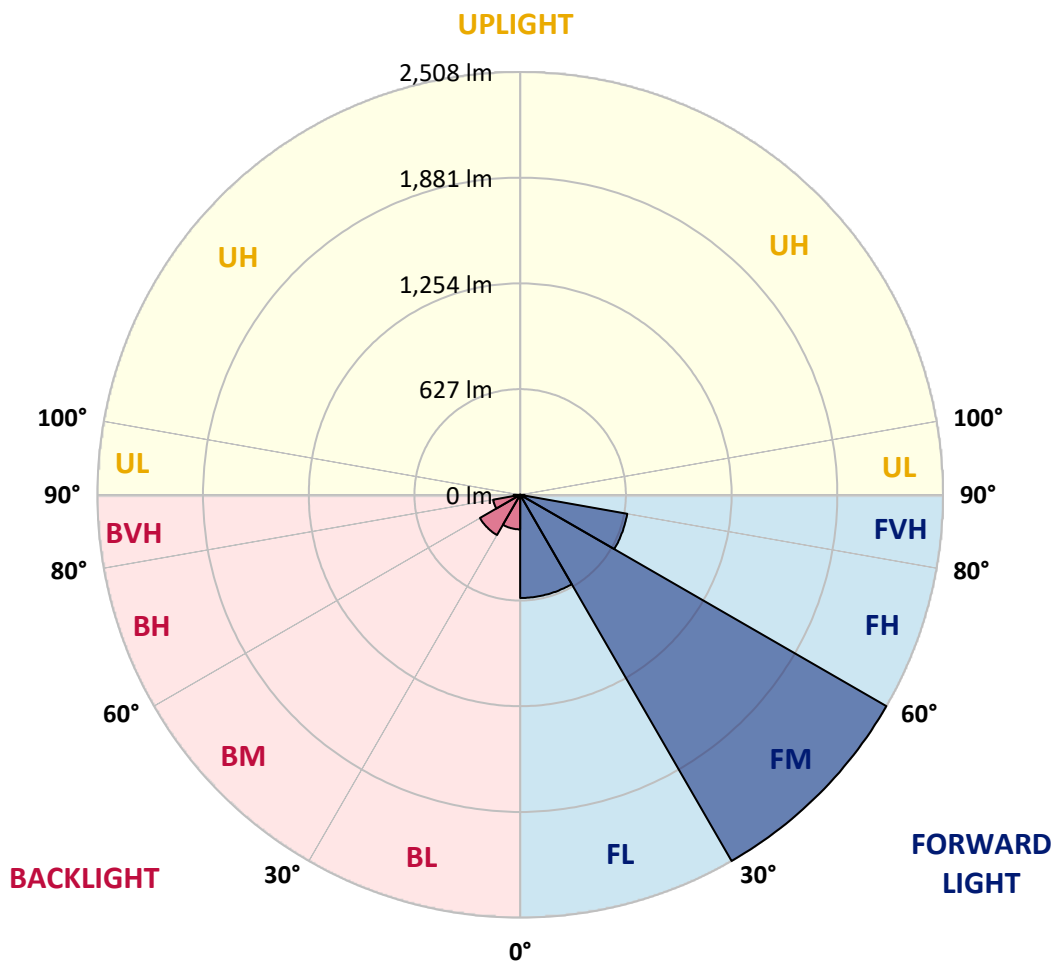
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	611.9	13.7			
FM (30°-60°)	2508.2	56.1			
FH (60°-80°)	645.0	14.4			G0/660
FVH (80°-90°)	25.4	0.6			G1/100
BL (0°-30°)	205.0	4.6	B1/500		
BM (30°-60°)	275.3	6.2	B1/1000		
BH (60°-80°)	162.7	3.6	B1/500		G1/500
BVH (80°-90°)	39.0	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°	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1
2.5°	1357.6	1346.7	1339.7	1333.6	1325.6	1308.5	1285.6	1271.1	1263.7	1238.6	1208.9
5°	1490.7	1481.0	1473.9	1465.7	1451.3	1424.6	1387.5	1358.0	1343.5	1293.4	1234.0
7.5°	1459.6	1463.6	1476.0	1497.7	1516.2	1512.6	1479.6	1442.1	1422.9	1353.2	1263.1
10°	1271.7	1278.6	1300.1	1350.9	1433.0	1517.3	1543.0	1517.1	1497.7	1412.4	1293.0
12.5°	1234.0	1233.8	1235.5	1248.9	1297.8	1416.4	1545.1	1571.2	1559.6	1468.8	1323.5
15°	1249.4	1249.8	1248.5	1254.2	1269.4	1316.3	1480.6	1592.0	1600.2	1525.7	1355.1
17.5°	1289.8	1288.7	1283.9	1283.9	1289.4	1307.7	1404.8	1572.7	1610.6	1576.0	1382.9
20°	1357.6	1352.8	1339.9	1328.1	1322.2	1332.1	1373.6	1528.0	1592.7	1620.0	1405.8
22.5°	1439.8	1436.0	1415.1	1389.8	1369.4	1369.2	1389.6	1489.0	1561.7	1661.5	1425.2
25°	1545.9	1539.8	1508.8	1468.4	1432.6	1418.9	1424.6	1487.1	1544.9	1706.6	1442.5
27.5°	1670.6	1659.4	1622.8	1564.4	1511.8	1484.2	1476.0	1521.5	1560.2	1762.4	1466.5
30°	1821.8	1809.0	1762.0	1686.0	1611.6	1566.3	1548.9	1582.3	1611.2	1830.4	1505.0
32.5°	1993.9	1975.3	1921.0	1837.2	1739.5	1670.4	1641.9	1662.8	1685.8	1912.4	1553.3
35°	2231.7	2209.5	2131.0	2015.4	1905.0	1810.0	1764.5	1779.7	1802.0	2034.5	1623.0
37.5°	2393.8	2383.9	2331.7	2223.0	2103.0	1993.7	1923.3	1932.2	1944.8	2187.2	1712.3
40°	2392.4	2396.4	2397.4	2398.5	2316.8	2212.1	2136.5	2127.2	2124.7	2354.9	1813.8
42.5°	2272.5	2289.0	2342.0	2449.6	2499.4	2451.3	2382.0	2355.3	2342.0	2552.4	1921.4
45°	2089.1	2097.9	2197.3	2407.5	2592.9	2688.3	2635.8	2551.6	2527.6	2734.0	2010.7
47.5°	1994.5	2004.2	2066.8	2295.9	2591.8	2879.7	2910.1	2749.6	2706.6	2891.9	2087.8
50°	1769.4	1789.6	1868.4	2101.7	2497.2	2967.8	3196.7	2985.4	2896.6	3045.7	2165.1
52.5°	1355.9	1387.1	1475.3	1782.4	2257.4	2924.2	3426.1	3271.5	3145.9	3204.9	2231.5
55°	855.3	878.5	952.6	1258.8	1805.8	2697.3	3513.0	3580.9	3469.2	3355.7	2289.0
57.5°	465.0	475.4	503.2	695.0	1174.6	2195.9	3386.2	3756.9	3710.6	3483.8	2332.3
58°	416.2	423.1	440.4	602.4	1041.7	2058.7	3330.0	3757.6	3734.4	3502.5	2335.7
60°	308.8	305.2	289.8	343.7	579.8	1422.3	2990.1	3607.2	3675.2	3525.5	2319.3
62.5°	271.3	262.6	231.3	227.7	282.0	655.2	2287.9	3089.9	3250.6	3394.5	2219.4
65°	254.8	245.6	205.1	192.1	203.5	277.2	1347.7	2317.4	2518.9	2997.2	1964.2
67.5°	242.6	230.6	188.5	170.6	171.4	183.2	540.2	1459.6	1686.4	2275.7	1527.8
70°	230.8	217.8	174.4	153.7	148.9	144.9	214.8	730.6	936.4	1437.4	974.1
72.5°	218.2	205.3	162.0	140.5	131.0	117.7	140.3	298.9	417.4	680.1	441.9
75°	199.9	188.3	149.5	128.7	115.2	97.5	105.9	156.1	187.2	270.8	212.9
77.5°	177.3	167.9	135.6	119.0	102.1	79.2	81.5	108.3	120.0	155.0	126.6
80°	127.4	130.8	120.7	107.0	91.0	64.2	62.6	79.0	85.3	99.6	82.3
82.5°	89.5	91.4	99.8	87.4	75.2	50.5	46.1	55.6	59.4	65.5	44.4
85°	61.7	59.6	68.4	60.9	54.3	33.7	31.6	37.7	40.0	40.6	23.0
87.5°	37.1	37.1	39.6	32.6	29.3	17.5	17.1	21.5	23.0	21.9	12.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P300355

CATALOG NUMBER: GLNA-AF-01-LED-E1-AFL-7027-800

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1	1188.1
2.5°	1191.2	1176.3	1144.5	1119.0	1086.8	1053.3	1034.5	1014.5	1000.8	990.9	1006.7
5°	1200.3	1169.7	1104.0	1041.7	972.8	901.2	846.9	796.3	761.2	739.3	759.9
7.5°	1214.6	1167.6	1063.0	956.4	832.8	713.6	607.0	540.2	501.3	482.1	494.1
10°	1231.0	1164.3	1014.7	840.8	663.9	513.7	434.1	407.1	398.3	394.7	396.4
12.5°	1244.7	1157.1	955.6	700.9	498.5	405.6	382.7	382.1	383.9	384.4	385.0
15°	1254.4	1146.6	867.7	555.2	398.7	369.6	368.4	372.2	375.7	377.2	378.1
17.5°	1260.9	1124.9	768.5	438.9	357.2	352.1	355.1	359.9	363.7	364.8	365.6
20°	1260.3	1093.1	650.4	366.0	334.7	334.7	339.7	343.5	343.7	342.5	343.1
22.5°	1253.8	1049.5	535.8	327.3	314.7	318.2	323.3	319.7	305.0	295.3	295.9
25°	1242.8	997.5	437.7	302.7	296.1	302.4	301.0	274.0	252.9	243.5	243.5
27.5°	1233.1	936.0	362.3	281.2	277.6	285.4	259.3	234.8	226.0	221.6	220.1
30°	1226.2	869.6	311.9	260.5	260.1	254.4	224.9	218.2	216.7	213.1	211.9
32.5°	1227.9	802.4	279.7	242.4	243.9	217.8	208.5	210.0	208.7	204.9	203.2
35°	1241.8	738.6	258.6	226.0	221.6	196.7	198.8	201.6	201.1	195.9	194.2
37.5°	1266.6	678.2	244.7	212.3	193.3	186.2	189.6	193.8	192.7	189.1	187.9
40°	1292.7	621.3	233.4	201.6	176.7	179.0	182.0	184.3	185.3	186.4	185.6
42.5°	1318.2	561.9	219.5	190.6	169.8	172.3	173.5	175.9	181.5	185.6	185.3
45°	1333.4	506.1	205.1	175.0	164.3	165.8	164.9	169.5	176.5	183.0	183.2
47.5°	1350.2	462.7	193.8	160.7	159.0	160.1	157.5	162.2	168.5	176.5	177.3
50°	1370.7	436.8	184.7	149.3	151.9	151.9	151.2	155.4	164.3	173.5	175.2
52.5°	1393.8	431.8	177.1	141.1	144.7	144.5	145.1	151.4	161.1	170.2	171.7
55°	1422.1	445.4	168.9	135.0	137.7	138.6	140.7	147.9	156.1	166.4	167.0
57.5°	1454.9	473.2	162.4	130.2	131.4	134.2	137.5	144.1	152.9	164.3	164.9
58°	1460.4	479.1	161.3	129.7	130.2	133.3	137.1	143.4	152.3	164.7	165.3
60°	1460.6	498.7	159.0	127.8	125.3	130.6	134.8	141.1	151.2	166.2	167.6
62.5°	1408.8	498.5	157.3	125.1	120.3	126.8	131.6	139.0	150.2	169.8	172.7
65°	1240.5	453.0	149.3	120.9	116.3	123.4	128.9	137.5	153.1	185.3	187.2
67.5°	970.3	371.3	134.4	115.0	111.0	120.0	127.2	137.3	156.3	188.9	190.2
70°	641.5	277.8	117.9	108.3	105.5	116.0	128.1	144.5	152.7	181.3	178.0
72.5°	333.0	195.0	104.7	99.8	99.2	112.5	140.3	143.6	149.1	170.6	166.4
75°	174.8	135.4	93.1	90.6	91.6	111.6	165.5	139.8	144.5	163.2	171.2
77.5°	107.0	109.3	83.2	82.1	84.2	109.1	165.3	135.0	137.7	150.2	159.0
80°	71.6	88.7	75.6	75.8	77.3	99.8	148.5	127.4	129.5	142.0	151.0
82.5°	45.3	52.4	68.7	72.2	70.3	82.3	126.2	116.0	119.0	162.4	171.7
85°	23.0	32.9	59.6	69.5	63.4	57.7	102.4	101.7	103.2	117.1	122.4
87.5°	10.5	18.1	46.5	60.7	47.8	36.0	74.3	75.4	81.3	83.2	83.2
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)