

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: P299941

Luminaire Tested: **GLNA-AF-02-LED-E1-SL3-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299941
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-02-LED-E1-SL3-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K 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: 6946.9 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

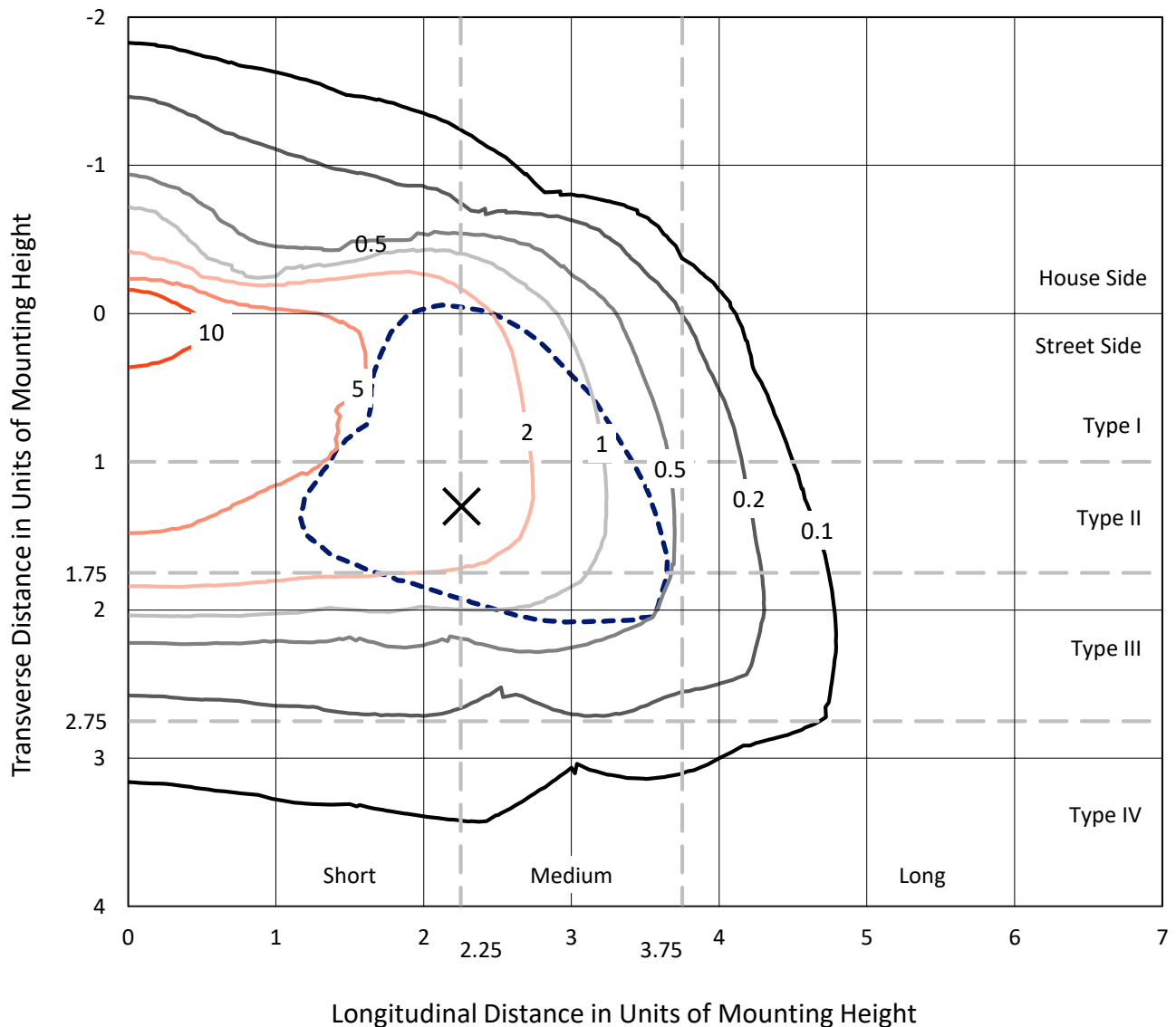
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

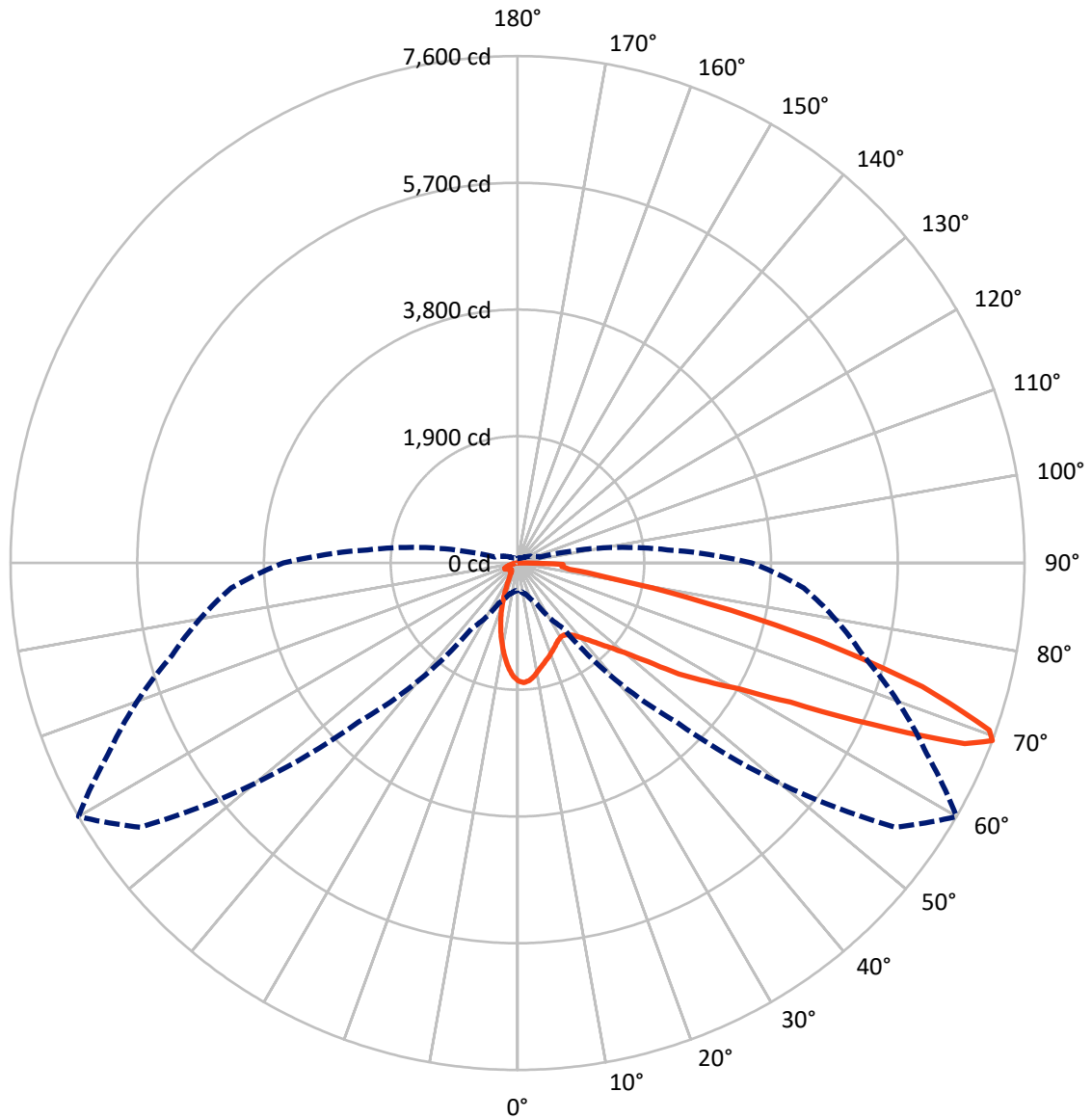
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 17.7 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	988.3	0.0	988.3
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	5958.6	0.0	5958.6
	% Fixture	85.8	0.0	85.8
Total	Lumens	6946.9	0.0	6946.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.7	2.2
10°-20°	318.9	4.6
20°-30°	406.3	5.8
30°-40°	558.6	8.0
40°-50°	906.4	13.0
50°-60°	1453.6	20.9
60°-70°	1934.6	27.8
70°-80°	1044.5	15.0
80°-90°	174.3	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°	6946.9	100.0
0°-180°	6946.9	100.0

Coefficient of Utilization



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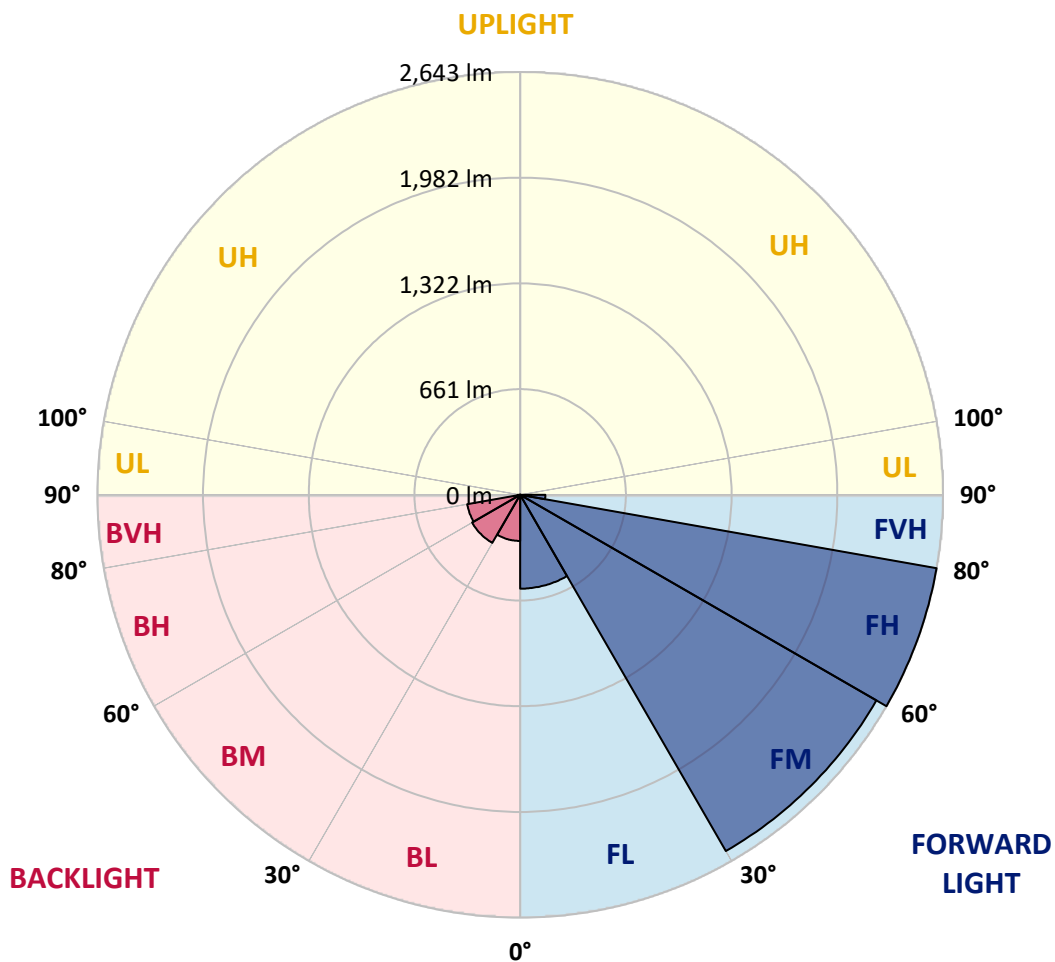
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	586.6	8.4			
FM	(30°-60°)	2571.3	37.0			
FH	(60°-80°)	2643.2	38.0			G2/5000
FVH	(80°-90°)	157.5	2.3			G2/225
BL	(0°-30°)	288.3	4.2	B1/500		
BM	(30°-60°)	347.2	5.0	B1/1000		
BH	(60°-80°)	336.0	4.8	B1/500		G1/500
BVH	(80°-90°)	16.8	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°	1770.2	1770.2	1770.2	1770.2	1770.2	1770.2	1770.2	1770.2	1770.2	1770.2	1770.2
2.5°	1806.4	1810.4	1808.8	1807.8	1810.8	1806.1	1796.3	1793.3	1788.6	1777.6	1758.8
5°	1738.6	1750.7	1750.0	1759.1	1774.2	1778.2	1773.9	1774.5	1765.8	1752.0	1720.8
7.5°	1621.5	1626.5	1629.2	1649.0	1676.5	1698.7	1717.5	1723.5	1719.5	1707.8	1667.5
10°	1500.7	1504.7	1511.1	1534.3	1569.2	1599.7	1635.3	1655.7	1664.5	1662.4	1617.5
12.5°	1397.0	1401.0	1409.4	1435.6	1477.2	1514.8	1566.5	1592.0	1612.8	1625.2	1576.9
15°	1304.1	1312.8	1320.8	1351.0	1397.7	1447.0	1505.4	1537.6	1569.8	1597.7	1541.0
17.5°	1231.6	1240.3	1245.0	1272.5	1322.2	1382.6	1451.0	1489.0	1529.2	1574.9	1505.4
20°	1189.6	1193.6	1191.6	1207.1	1251.7	1315.8	1397.0	1441.0	1489.6	1553.4	1469.8
22.5°	1177.9	1178.2	1170.8	1169.1	1198.0	1252.0	1339.3	1392.6	1452.4	1539.3	1439.3
25°	1206.4	1205.4	1185.3	1168.8	1171.8	1203.4	1283.6	1345.7	1421.2	1536.3	1415.8
27.5°	1269.8	1272.8	1243.0	1212.1	1181.6	1180.6	1241.3	1306.7	1395.7	1550.0	1405.7
30°	1358.8	1363.8	1331.9	1292.6	1235.3	1187.9	1224.9	1283.6	1379.9	1578.6	1404.1
32.5°	1456.1	1461.4	1437.3	1396.0	1320.8	1233.6	1236.3	1285.6	1379.2	1618.5	1415.5
35°	1559.8	1565.8	1553.4	1518.5	1434.9	1317.8	1279.9	1318.1	1401.0	1679.6	1446.0
37.5°	1675.5	1684.9	1688.3	1655.1	1565.8	1428.9	1351.4	1379.9	1450.4	1764.5	1502.0
40°	1842.3	1855.4	1854.4	1806.7	1715.8	1578.9	1461.8	1469.2	1527.2	1877.9	1591.6
42.5°	2161.8	2164.5	2080.9	1977.2	1880.9	1736.6	1592.0	1585.9	1633.3	2021.5	1723.5
45°	2568.2	2557.1	2371.2	2170.8	2053.4	1917.8	1761.4	1731.9	1767.8	2196.7	1888.6
47.5°	2905.4	2879.9	2645.0	2368.5	2235.9	2114.8	1960.4	1908.8	1928.6	2395.3	2102.1
50°	3022.5	3003.4	2808.8	2532.9	2408.8	2355.1	2205.4	2132.3	2137.6	2632.3	2352.1
52.5°	2997.4	2994.7	2864.8	2641.3	2570.5	2607.4	2552.4	2453.4	2401.1	2895.4	2621.9
55°	2938.0	2943.7	2896.7	2767.5	2755.4	2851.1	3005.8	2932.6	2769.9	3160.8	2900.7
57.5°	2731.6	2746.4	2849.7	2926.2	3053.1	3195.4	3370.9	3350.1	3166.8	3447.7	3232.3
60°	2200.7	2234.9	2512.1	2895.4	3359.5	3804.4	3883.0	3834.6	3576.2	3803.8	3670.2
62.5°	1542.0	1577.5	1907.1	2506.8	3309.1	4492.4	4798.4	4590.0	4164.2	4328.3	4237.0
65°	825.5	842.6	1094.3	1739.3	2793.7	4634.3	6136.4	5819.2	5095.1	4974.9	4721.9
67.5°	455.4	464.8	561.1	878.2	1789.3	4081.0	6988.7	7228.3	6258.5	5405.5	4633.6
69°	411.8	420.5	483.6	665.1	1197.3	3374.2	6905.5	7599.8	6768.6	5362.9	4307.5
70°	402.7	410.7	467.5	613.1	969.1	2781.3	6626.6	7504.8	6890.1	5210.2	4022.9
72.5°	362.4	371.1	426.2	550.7	828.2	1386.6	5249.1	6345.4	6255.5	4517.5	3051.4
75°	337.9	346.0	439.3	539.3	793.0	877.5	3460.5	4676.6	4598.4	3160.1	1645.3
77.5°	144.6	144.0	203.7	456.4	804.7	849.7	1859.4	2921.5	2665.5	1350.7	472.5
80°	96.6	95.0	96.6	134.2	737.9	854.4	974.2	1482.9	1120.2	344.3	232.9
82.5°	83.2	81.9	84.9	81.9	259.4	975.2	828.2	788.6	532.6	195.6	115.4
85°	56.0	53.7	73.2	73.5	122.5	866.5	932.9	666.1	430.9	116.1	57.0
87.5°	26.8	26.2	42.6	52.0	71.8	352.0	1046.7	682.6	434.6	59.4	27.2
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°	1770.2	1770.2	1770.2	1770.2	1770.2	1770.2	1770.2	1770.2	1770.2	1770.2	1770.2
2.5°	1753.1	1739.3	1725.9	1709.8	1693.0	1674.2	1664.8	1655.4	1653.1	1650.4	1641.0
5°	1704.7	1685.3	1651.7	1614.8	1575.9	1537.9	1509.1	1491.0	1477.2	1470.2	1457.7
7.5°	1642.3	1613.8	1555.1	1491.3	1425.9	1366.1	1314.5	1281.9	1251.0	1236.6	1220.2
10°	1582.9	1540.3	1449.0	1355.1	1261.1	1170.8	1085.9	1025.9	972.5	942.6	921.5
12.5°	1531.9	1473.5	1347.0	1219.8	1091.0	962.4	835.3	735.2	651.7	607.7	585.2
15°	1482.2	1411.8	1250.0	1088.6	923.2	748.3	581.2	467.8	398.7	371.1	361.8
17.5°	1437.3	1347.0	1152.7	956.4	750.0	538.6	390.6	328.2	301.7	292.6	289.6
20°	1388.6	1281.6	1051.7	818.1	569.5	376.5	305.0	277.5	266.8	264.1	262.8
22.5°	1341.6	1217.1	955.1	670.1	409.1	290.6	262.1	250.7	249.0	251.3	251.3
25°	1301.7	1159.4	850.7	515.4	300.3	244.6	234.6	231.9	238.3	247.0	248.7
27.5°	1271.8	1112.1	739.6	380.5	239.3	212.8	212.4	216.8	232.6	249.3	252.7
30°	1251.4	1067.1	620.8	274.5	200.7	187.3	192.6	202.0	225.2	249.0	255.4
32.5°	1241.0	1033.9	497.0	212.4	171.8	164.4	173.5	184.9	207.7	229.9	238.3
35°	1249.0	1009.4	380.2	177.2	151.7	146.0	155.4	166.4	179.9	189.3	195.6
37.5°	1279.2	999.7	286.9	158.7	137.9	132.6	139.9	146.3	151.7	154.4	157.4
40°	1344.3	1010.1	229.9	149.3	130.2	123.5	126.5	128.9	132.2	134.9	136.2
42.5°	1440.3	1041.3	206.0	145.6	126.2	116.4	115.8	116.8	121.1	126.2	127.2
45°	1574.5	1096.3	204.4	148.0	124.2	110.7	107.7	109.1	115.8	123.5	124.8
47.5°	1746.0	1180.2	217.8	155.0	125.8	107.7	102.7	104.4	112.8	123.2	124.8
50°	1953.7	1297.3	240.3	165.4	133.2	108.4	101.0	102.0	110.7	122.1	123.8
52.5°	2199.0	1463.5	264.8	175.5	140.9	112.8	102.4	100.0	108.1	118.1	120.1
55°	2471.9	1676.5	289.9	184.6	145.0	118.1	105.0	97.3	103.0	111.4	113.1
57.5°	2806.8	1974.5	333.6	193.3	147.7	121.8	107.7	94.6	96.6	102.7	104.0
60°	3260.1	2396.0	410.4	207.7	153.7	123.2	107.4	92.3	90.3	93.6	94.3
62.5°	3803.4	2853.7	474.5	225.8	163.8	124.2	105.4	90.6	84.9	84.9	85.6
65°	4125.9	2976.2	438.9	240.9	172.2	123.2	103.0	88.9	80.9	77.2	77.5
67.5°	3852.4	2617.5	376.2	244.0	171.8	118.5	99.3	85.9	76.8	71.1	70.8
69°	3509.8	2258.4	348.0	235.9	163.8	112.4	94.6	82.6	73.8	67.8	67.5
70°	3233.6	2039.3	329.5	227.2	155.0	108.1	90.9	79.5	71.5	65.8	65.1
72.5°	2351.1	1336.3	281.5	195.3	127.9	90.6	78.5	69.8	63.8	60.4	59.7
75°	1174.9	637.3	228.5	158.4	98.0	72.5	64.4	58.4	55.4	54.7	54.4
77.5°	385.9	292.0	163.4	118.1	72.8	56.7	52.0	47.7	47.0	49.0	48.3
80°	212.1	169.8	103.7	78.2	49.7	41.6	40.9	38.6	39.6	43.0	42.3
82.5°	108.1	88.3	64.1	47.0	33.6	29.9	32.6	31.2	32.6	35.6	35.2
85°	53.4	48.3	40.6	28.5	22.1	19.1	23.2	24.2	24.8	27.2	27.2
87.5°	30.9	28.5	21.5	13.4	11.1	10.1	13.4	13.1	15.4	16.8	16.4
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)