

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: P299641

Luminaire Tested: **GLNA-AF-02-LED-E1-SL2-7027-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299641
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)
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-SL2-7027-800-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6431.6 lumens
Efficiency: N/A
Efficacy: 75.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 85
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

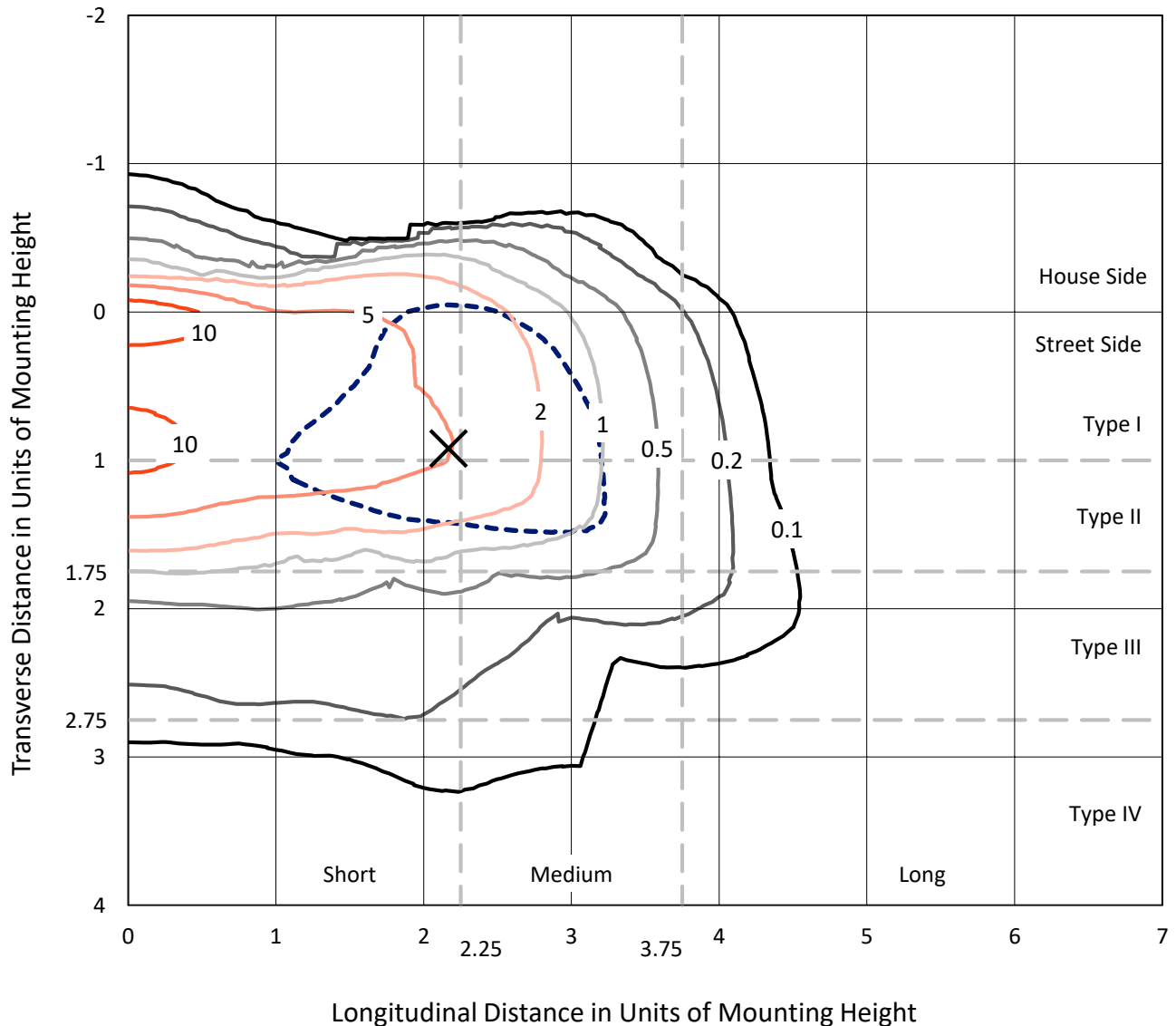


REPORT NUMBER: P299641

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL2-7027-800-HSS

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

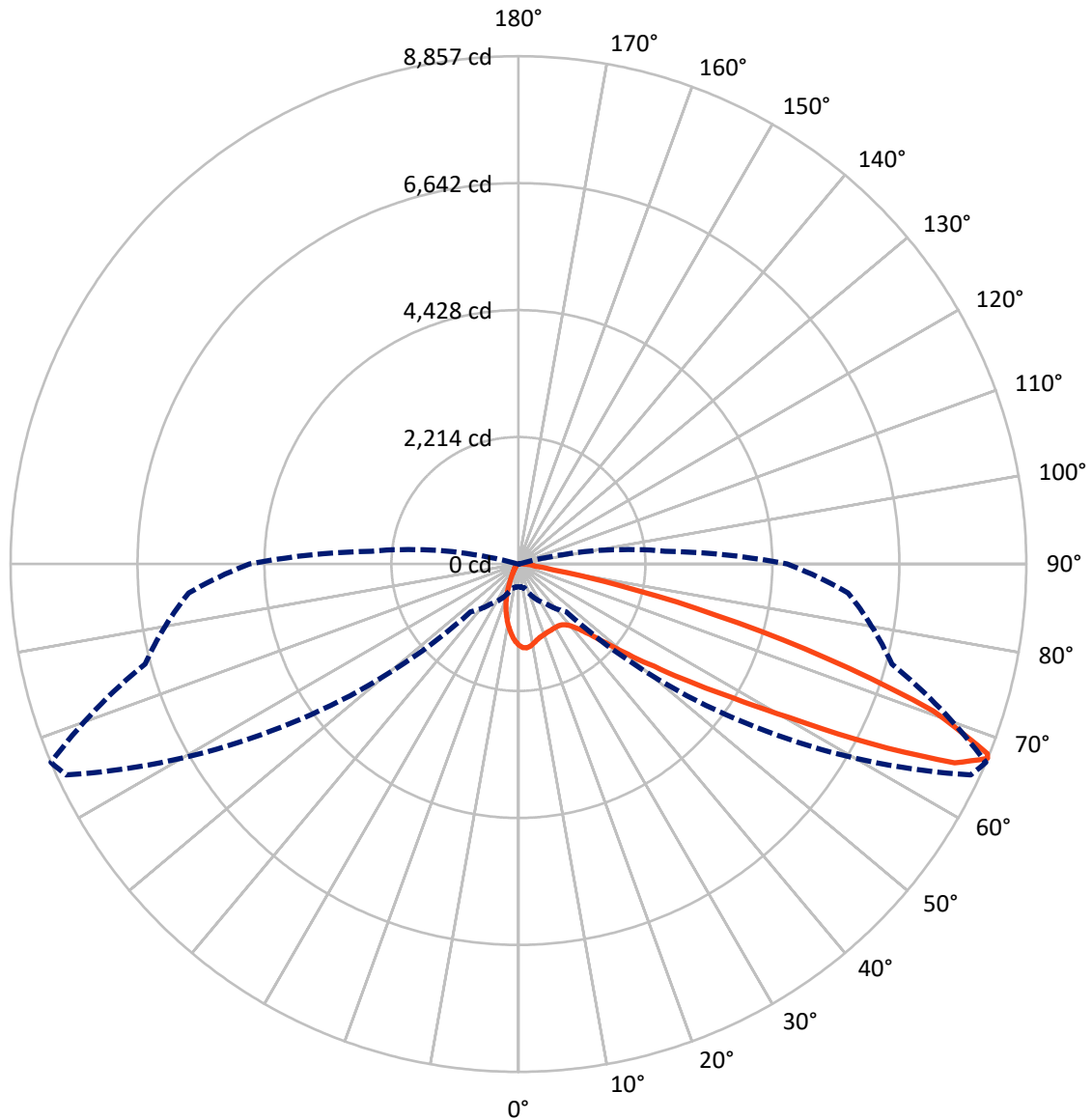


Based on 10 foot mounting height. Maximum calculated value = 14.2 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P299641

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL2-7027-800-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

REPORT NUMBER: P299641

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL2-7027-800-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	667.8	0.0	667.8
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	5763.8	0.0	5763.8
	% Fixture	89.6	0.0	89.6
Total	Lumens	6431.6	0.0	6431.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.4	1.8
10°-20°	245.6	3.8
20°-30°	357.1	5.6
30°-40°	557.2	8.7
40°-50°	987.0	15.3
50°-60°	1561.8	24.3
60°-70°	1788.8	27.8
70°-80°	742.0	11.5
80°-90°	76.6	1.2
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°	6431.6	100.0
0°-180°	6431.6	100.0

Coefficient of Utilization



REPORT NUMBER: P299641

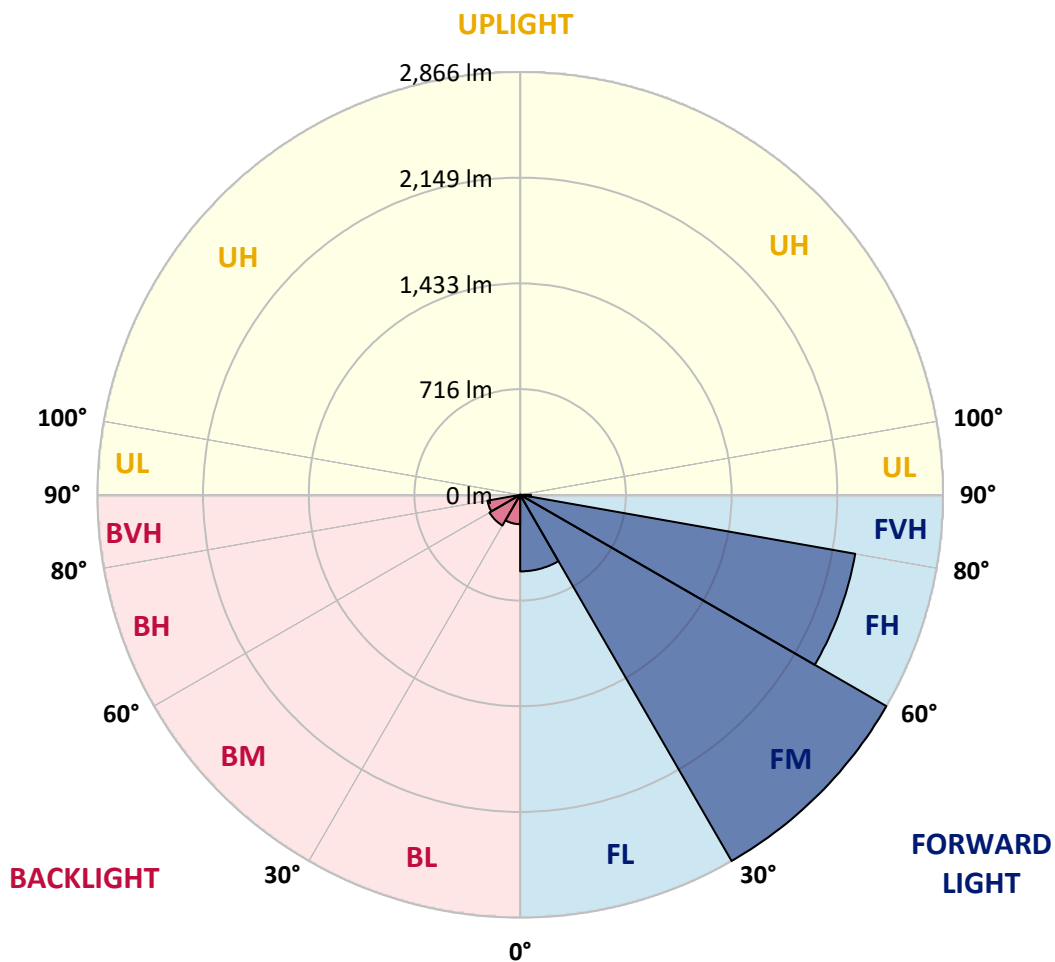
CATALOG NUMBER: GLNA-AF-02-LED-E1-SL2-7027-800-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	518.9	8.1			
FM (30°-60°)	2865.9	44.6			
FH (60°-80°)	2305.7	35.9			G2/5000
FVH (80°-90°)	73.2	1.1			G1/100
BL (0°-30°)	199.3	3.1	B1/500		
BM (30°-60°)	240.0	3.7	B1/1000		
BH (60°-80°)	225.1	3.5	B1/500		G1/500
BVH (80°-90°)	3.5	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





REPORT NUMBER: P299641

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL2-7027-800-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4
2.5°	1466.4	1469.4	1469.0	1471.3	1476.5	1476.9	1471.7	1461.5	1459.3	1446.2	1423.3
5°	1352.4	1361.0	1366.2	1387.6	1411.6	1440.5	1462.3	1470.2	1469.0	1459.7	1425.1
7.5°	1222.2	1230.8	1236.8	1262.0	1293.8	1343.4	1400.0	1446.5	1450.7	1460.8	1423.6
10°	1135.5	1137.0	1145.3	1169.3	1202.7	1253.3	1320.9	1402.3	1414.6	1451.8	1419.9
12.5°	1064.3	1065.4	1076.3	1102.2	1137.8	1188.8	1259.7	1353.9	1373.0	1440.5	1419.1
15°	1013.6	1017.7	1027.5	1054.5	1092.4	1143.0	1215.8	1318.2	1341.1	1436.4	1425.9
17.5°	996.7	1001.2	1004.2	1023.7	1058.3	1107.8	1182.4	1295.0	1320.9	1438.6	1439.0
20°	1014.4	1017.7	1011.0	1015.9	1037.3	1081.5	1154.3	1275.1	1305.9	1441.3	1455.9
22.5°	1080.0	1081.5	1063.1	1041.8	1038.0	1062.4	1132.2	1259.3	1292.3	1448.4	1475.8
25°	1192.6	1189.9	1159.9	1113.8	1070.3	1059.0	1119.0	1249.6	1285.6	1455.9	1496.4
27.5°	1328.4	1332.1	1290.8	1223.7	1140.8	1081.5	1117.2	1245.5	1282.6	1461.2	1514.4
30°	1493.4	1498.7	1451.4	1367.0	1248.1	1137.0	1134.4	1244.7	1280.7	1457.8	1515.9
32.5°	1661.9	1668.2	1631.1	1544.1	1391.4	1230.1	1173.4	1253.0	1284.5	1446.2	1507.3
35°	1838.2	1847.2	1822.4	1747.8	1585.7	1364.4	1242.1	1278.1	1302.1	1445.0	1498.7
37.5°	2081.6	2089.9	2043.4	1964.2	1820.9	1544.4	1352.4	1325.4	1343.7	1463.0	1500.9
40°	2445.1	2444.0	2324.0	2202.8	2079.4	1773.3	1507.3	1410.9	1420.3	1517.4	1528.7
42.5°	2841.3	2839.4	2662.0	2477.8	2366.4	2055.0	1711.0	1558.7	1552.3	1617.6	1600.7
45°	3146.6	3146.3	3001.5	2794.0	2711.9	2378.4	1974.3	1764.3	1754.5	1780.4	1733.5
47.5°	3276.8	3279.1	3206.3	3060.4	3094.9	2815.8	2306.3	2062.1	2047.5	2037.0	1965.7
50°	3175.5	3180.0	3186.0	3157.5	3375.9	3403.6	2751.6	2481.9	2474.8	2427.9	2316.5
52.5°	2844.7	2867.5	2938.1	3028.5	3473.4	3967.8	3449.8	3003.3	2965.1	2915.2	2792.5
55°	2287.2	2312.3	2446.3	2665.7	3328.2	4338.5	4428.1	3675.6	3611.8	3462.9	3285.8
57.5°	1513.7	1552.7	1747.0	2026.1	2906.6	4398.1	5404.2	4608.6	4386.5	3978.7	3779.1
60°	833.9	871.4	1082.3	1335.1	2099.3	4103.2	6060.7	5823.2	5430.9	4555.3	4378.2
62.5°	513.6	533.8	689.5	924.7	1259.0	3238.6	6196.5	7349.7	6895.4	5297.7	5101.9
65°	408.9	417.5	493.7	755.9	902.6	1926.3	5758.0	8513.4	8361.8	6196.5	5749.7
67°	396.9	400.3	436.3	649.0	850.8	1180.9	4823.9	8702.8	8856.6	6740.5	5770.0
67.5°	399.5	403.3	437.4	619.4	849.3	1085.3	4502.0	8628.1	8822.5	6783.6	5680.3
70°	385.3	396.9	500.8	619.0	807.7	901.8	2696.1	7475.7	7677.9	6303.0	4819.8
72.5°	136.5	137.3	216.5	500.8	878.2	911.6	1353.9	5480.4	5630.1	4821.6	3474.9
75°	81.0	69.0	72.0	142.6	839.2	885.3	781.0	3501.9	3557.8	2762.9	1759.8
77.5°	55.9	48.8	50.3	63.0	319.6	872.9	620.5	1826.2	1766.5	969.0	374.8
80°	31.9	28.1	30.0	55.1	116.3	814.4	585.2	740.5	631.4	164.3	103.5
82.5°	16.9	14.3	17.3	45.4	81.0	507.6	586.3	357.9	283.6	55.5	70.5
85°	6.0	4.9	8.3	31.1	54.0	155.7	543.6	300.9	236.3	27.0	53.6
87.5°	1.1	1.1	3.4	12.8	21.8	47.6	321.5	178.6	119.7	16.1	36.8
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: P299641

CATALOG NUMBER: GLNA-AF-02-LED-E1-SL2-7027-800-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4	1418.4
2.5°	1413.9	1397.8	1376.0	1349.4	1317.9	1290.1	1269.5	1248.1	1243.6	1236.1	1235.0
5°	1404.5	1376.8	1322.7	1260.8	1194.8	1135.2	1086.8	1043.6	1024.5	1008.0	1006.1
7.5°	1390.6	1349.0	1257.1	1157.3	1054.1	960.4	880.8	824.6	772.8	748.0	744.3
10°	1374.5	1314.9	1183.2	1044.8	902.2	769.8	651.6	552.6	492.6	456.9	452.4
12.5°	1359.5	1281.5	1107.8	928.1	738.6	561.6	409.6	315.1	252.1	226.6	223.6
15°	1352.4	1254.5	1037.3	808.8	567.6	357.5	224.0	173.3	152.7	146.7	146.3
17.5°	1351.6	1231.6	968.2	685.4	397.6	207.8	145.9	133.2	129.0	127.5	127.5
20°	1351.2	1209.8	899.2	557.5	252.5	138.4	121.5	118.5	115.5	113.7	113.7
22.5°	1355.4	1190.3	827.2	426.9	159.1	112.2	106.9	103.9	100.2	97.5	97.2
25°	1359.5	1175.3	753.6	303.9	115.2	97.5	92.3	88.2	82.9	79.5	79.2
27.5°	1360.2	1156.5	674.9	203.3	96.4	85.2	78.4	72.0	66.0	62.6	62.3
30°	1349.0	1125.0	587.5	137.3	85.2	73.9	64.9	58.1	52.5	49.9	49.9
32.5°	1326.9	1086.0	491.4	103.5	75.8	63.4	53.6	47.3	43.5	42.4	42.0
35°	1307.0	1044.0	392.8	87.8	67.9	53.6	43.9	39.8	37.5	37.1	36.8
37.5°	1295.3	1010.2	300.1	79.5	60.4	45.0	37.1	34.1	33.0	32.3	32.6
40°	1304.4	982.1	221.7	72.8	52.9	37.5	31.5	30.0	28.9	28.5	28.5
42.5°	1343.7	977.2	164.7	66.8	45.8	31.1	27.4	26.3	25.5	25.1	25.5
45°	1447.3	1007.2	127.9	61.1	38.6	26.3	23.3	22.9	22.5	22.5	22.5
47.5°	1603.0	1069.1	106.5	54.8	32.3	22.5	20.3	19.9	19.5	19.9	19.9
50°	1866.7	1182.4	95.3	48.4	26.6	19.1	17.3	17.3	17.3	17.3	17.6
52.5°	2267.7	1405.3	87.8	42.0	21.8	16.1	14.6	14.6	15.0	15.0	15.4
55°	2714.5	1700.9	81.0	35.6	18.4	13.5	12.0	12.4	12.8	13.1	13.1
57.5°	3199.2	2028.4	75.4	29.3	15.8	10.9	10.1	10.5	10.9	11.6	11.6
60°	3784.0	2382.9	67.1	22.9	13.1	8.6	7.9	8.6	9.8	10.5	10.9
62.5°	4426.2	2725.7	56.6	18.0	10.9	6.8	6.4	7.9	9.4	10.1	10.5
65°	4865.1	2833.4	43.5	14.6	8.3	4.9	5.3	7.1	9.0	10.1	10.1
67°	4687.3	2568.9	35.6	12.4	6.8	3.8	4.9	7.1	9.0	9.8	10.1
67.5°	4563.9	2465.4	34.1	12.0	6.4	3.8	4.9	7.1	9.0	10.1	10.1
70°	3713.5	1852.1	28.5	9.0	5.3	3.4	4.1	6.8	8.6	9.8	9.8
72.5°	2580.2	1141.9	25.5	6.4	4.5	3.0	3.8	6.4	8.3	9.4	9.8
75°	1226.7	413.4	21.8	4.9	4.1	2.6	3.4	6.4	8.3	9.4	9.4
77.5°	250.2	96.0	17.6	4.1	3.4	2.6	3.0	6.0	7.9	9.0	9.0
80°	82.2	37.1	13.1	3.8	3.4	2.6	3.0	5.6	7.9	8.6	9.0
82.5°	59.3	18.8	8.6	3.8	3.4	2.6	2.6	5.6	7.5	8.6	8.6
85°	45.4	13.1	5.6	3.8	3.4	2.6	2.6	5.3	7.1	8.3	8.3
87.5°	30.0	5.3	4.5	3.8	3.4	2.6	2.6	5.3	6.8	7.9	8.3
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)