

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: P299995

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299995  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)  
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-HSS  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

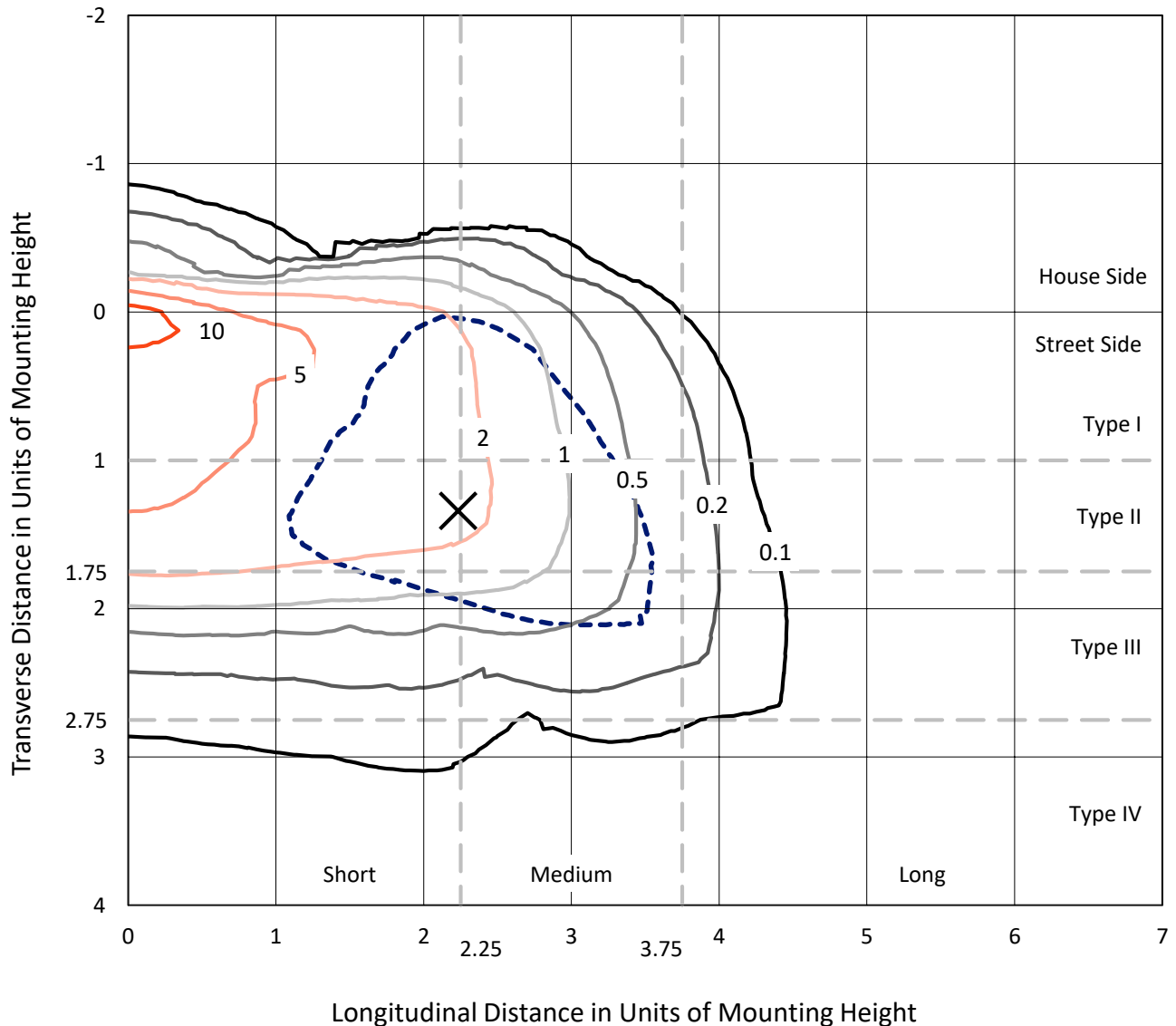
Lumens per Lamp: N/A  
Luminaire Lumens: 4836.5 lumens  
Efficiency: N/A  
Efficacy: 82.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 59  
Input Voltage (V): NR  
Input Current (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

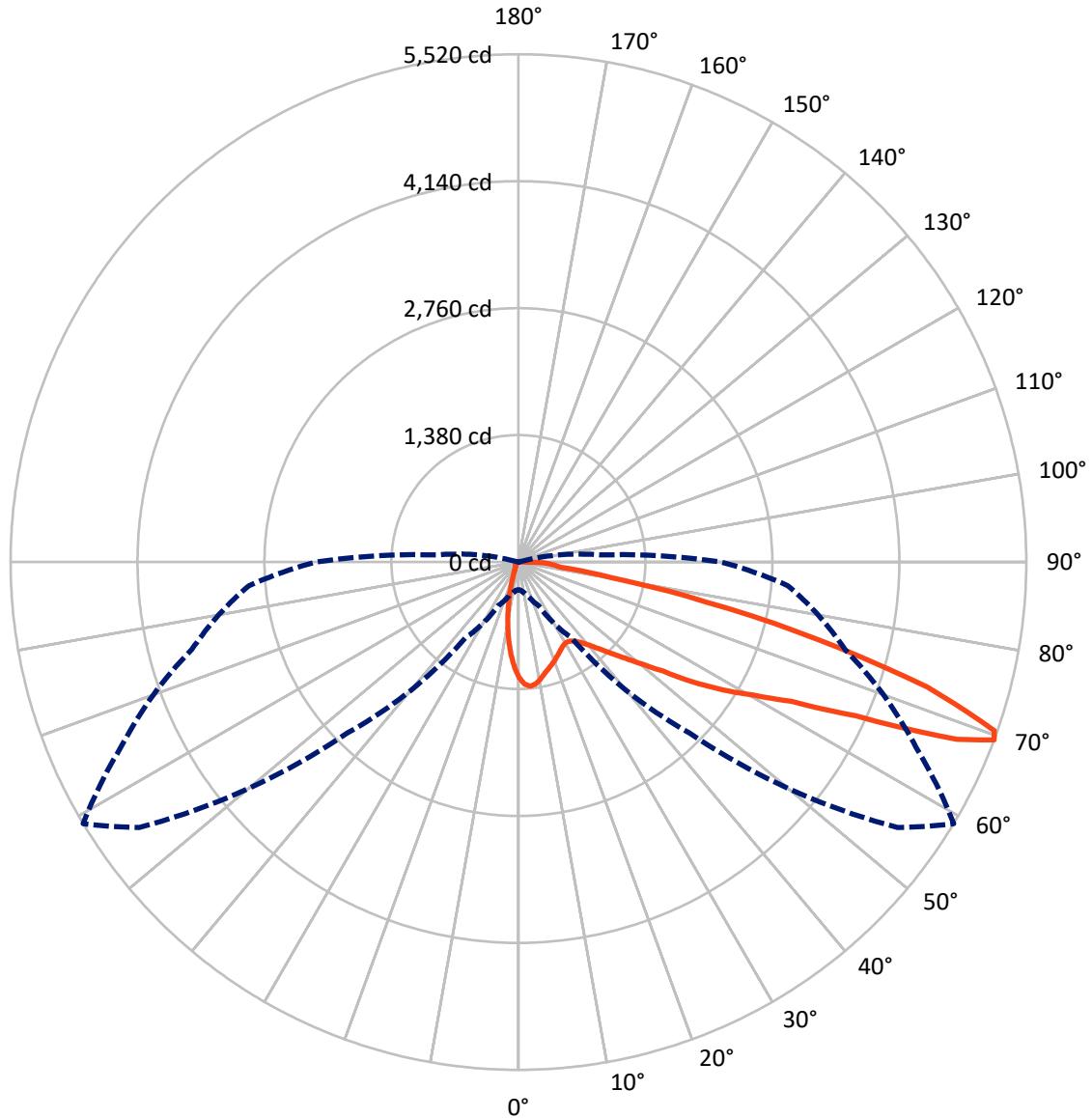
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.6 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	393.9	0.0	393.9
	% Fixture	8.1	0.0	8.1
<b>Street Side</b>	Lumens	4442.7	0.0	4442.7
	% Fixture	91.9	0.0	91.9
<b>Total</b>	Lumens	4836.5	0.0	4836.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.2	2.1
10°-20°	211.1	4.4
20°-30°	284.1	5.9
30°-40°	412.5	8.5
40°-50°	686.9	14.2
50°-60°	1071.5	22.2
60°-70°	1325.9	27.4
70°-80°	672.0	13.9
80°-90°	70.3	1.5
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°	4836.5	100.0
0°-180°	4836.5	100.0



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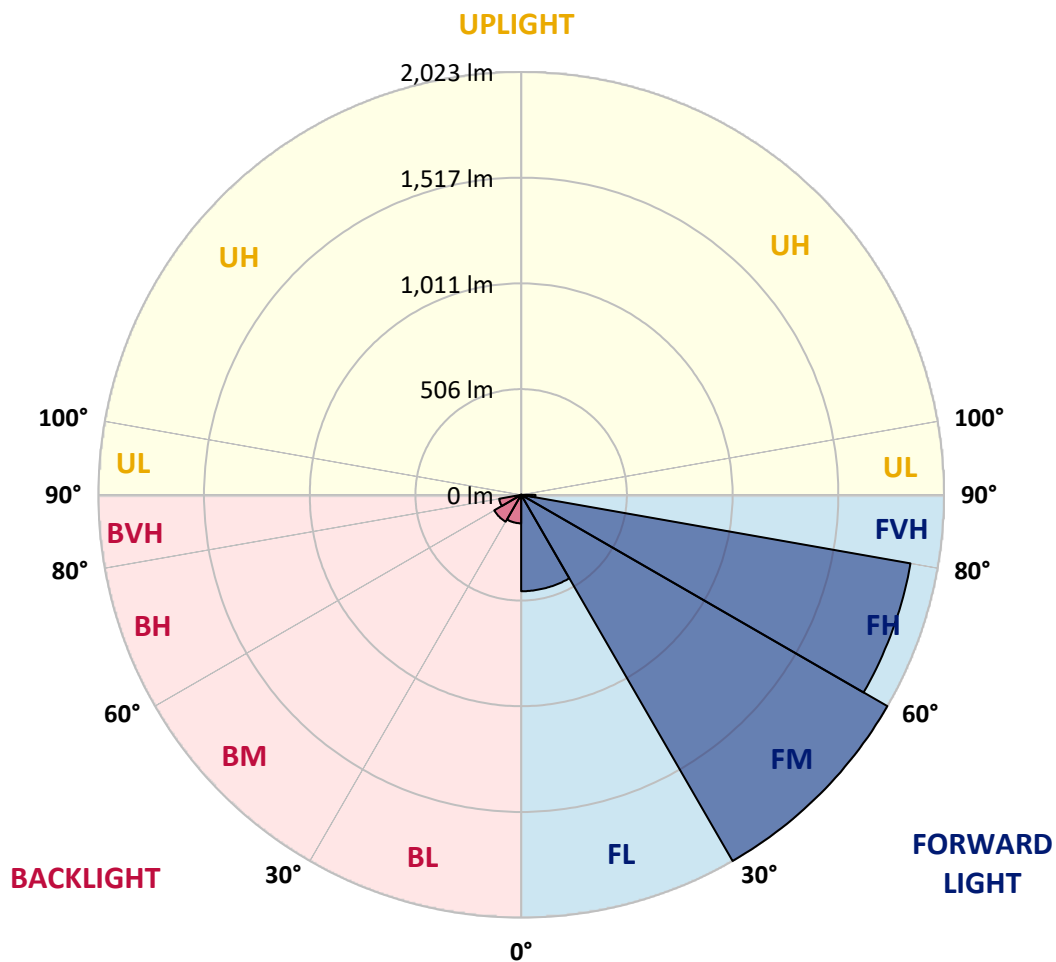
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	461.1	9.5			
FM	(30°-60°)	2022.5	41.8			
FH	(60°-80°)	1890.9	39.1			G2/5000
FVH	(80°-90°)	68.1	1.4			G1/100
BL	(0°-30°)	136.3	2.8	B1/500		
BM	(30°-60°)	148.4	3.1	B0/220		
BH	(60°-80°)	107.0	2.2	B0/110		G0/110
BVH	(80°-90°)	2.2	0.0			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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1258.9	1258.9	1258.9	1258.9	1258.9	1258.9	1258.9	1258.9	1258.9	1258.9	1258.9
2.5°	1379.8	1379.3	1373.2	1370.5	1365.5	1355.2	1339.0	1330.6	1316.9	1293.1	1261.1
5°	1367.2	1373.8	1377.3	1377.6	1381.2	1377.3	1362.8	1355.7	1336.9	1298.5	1241.1
7.5°	1281.9	1284.3	1294.5	1303.2	1320.1	1336.3	1341.5	1338.4	1327.3	1286.3	1209.9
10°	1190.5	1192.9	1205.0	1216.5	1239.5	1264.3	1290.6	1296.1	1300.8	1268.7	1179.9
12.5°	1111.7	1114.2	1126.5	1141.5	1168.4	1199.0	1239.7	1248.8	1269.3	1252.1	1155.8
15°	1043.9	1045.0	1057.1	1075.6	1107.7	1147.0	1193.3	1207.8	1239.2	1240.3	1134.7
17.5°	986.2	988.9	996.4	1014.1	1049.1	1097.8	1151.7	1172.5	1209.3	1230.5	1114.2
20°	950.9	953.6	953.4	963.3	994.7	1046.6	1110.1	1135.0	1179.9	1220.4	1095.9
22.5°	944.1	944.1	937.0	935.6	954.2	997.7	1066.9	1097.2	1153.3	1216.0	1083.1
25°	968.5	967.3	949.6	935.1	935.9	961.8	1025.0	1061.1	1130.9	1218.9	1076.2
27.5°	1019.9	1018.5	996.0	968.5	946.3	946.0	993.3	1032.1	1113.1	1233.2	1078.9
30°	1090.9	1090.4	1066.1	1031.3	991.2	954.2	982.4	1017.7	1101.6	1258.9	1085.2
32.5°	1168.6	1167.8	1149.5	1112.9	1062.0	991.2	993.9	1023.5	1104.9	1293.1	1100.5
35°	1251.0	1249.6	1241.6	1209.7	1153.6	1059.2	1031.6	1054.6	1125.7	1344.2	1130.6
37.5°	1340.1	1341.5	1347.2	1316.6	1257.8	1154.7	1094.8	1110.4	1167.5	1413.7	1179.5
40°	1471.7	1471.4	1473.3	1433.1	1376.5	1271.4	1183.1	1188.1	1237.6	1505.9	1254.0
42.5°	1710.4	1693.7	1643.2	1561.1	1504.2	1404.9	1294.5	1289.2	1323.2	1619.9	1358.1
45°	2031.3	1995.6	1864.4	1707.2	1634.4	1555.4	1431.4	1414.8	1436.4	1756.9	1486.7
47.5°	2307.2	2270.2	2084.6	1859.2	1772.5	1698.1	1592.0	1561.9	1569.0	1910.4	1649.7
50°	2401.0	2382.9	2220.8	1991.6	1906.2	1877.8	1778.3	1741.6	1731.5	2087.8	1838.7
52.5°	2368.4	2367.1	2259.0	2077.5	2028.8	2063.8	2012.6	1970.2	1933.0	2274.9	2030.9
55°	2316.2	2323.1	2274.6	2152.6	2151.0	2233.6	2333.2	2297.9	2190.2	2478.1	2196.7
57.5°	2172.1	2201.3	2265.9	2294.9	2362.1	2446.7	2600.1	2620.9	2493.5	2633.7	2334.2
60°	1762.4	1826.6	2037.8	2315.3	2634.3	2844.9	2922.3	2940.0	2742.3	2763.1	2520.0
62.5°	1251.0	1316.6	1584.4	2053.9	2638.4	3368.0	3402.2	3332.5	3016.4	2954.8	2840.2
65°	664.0	714.7	933.4	1482.6	2287.5	3489.5	4241.6	4033.8	3499.9	3331.9	3254.0
67.5°	339.7	355.0	442.0	725.6	1572.6	3099.5	4994.0	5140.3	4333.2	3706.1	3234.1
69°	300.6	309.6	367.3	524.6	1007.0	2625.3	5030.6	5520.2	4769.5	3674.9	2938.9
70°	291.0	298.9	351.4	474.8	787.1	2201.6	4890.3	5486.8	4881.0	3556.2	2718.5
72.5°	247.0	253.8	312.9	419.6	639.7	1092.8	3972.5	4649.4	4380.0	2962.5	1967.7
75°	165.2	187.6	300.3	393.3	595.1	620.9	2619.0	3359.8	3121.1	1998.1	1025.0
77.5°	39.7	42.6	84.8	312.9	544.3	546.4	1347.0	2088.6	1703.6	712.2	242.3
80°	21.4	20.5	23.8	62.1	506.8	512.8	606.4	1013.8	608.3	118.2	79.8
82.5°	15.1	14.2	15.3	26.0	159.5	467.1	438.7	458.9	252.1	45.4	35.9
85°	5.5	5.2	8.4	23.5	50.0	268.5	450.7	378.5	204.3	20.8	26.2
87.5°	1.9	1.7	3.3	12.8	15.3	114.4	278.1	286.1	80.4	12.6	12.3
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°	1258.9	1258.9	1258.9	1258.9	1258.9	1258.9	1258.9	1258.9	1258.9	1258.9	1258.9
2.5°	1247.7	1230.7	1199.6	1167.5	1138.0	1102.4	1084.6	1067.2	1059.8	1057.1	1044.2
5°	1211.6	1182.8	1116.7	1050.2	988.9	923.8	880.9	846.5	826.2	816.4	800.8
7.5°	1165.4	1118.3	1017.9	915.4	819.9	725.9	656.1	602.5	565.5	547.8	531.7
10°	1120.5	1057.9	915.1	775.4	645.7	521.0	424.7	355.0	310.4	289.9	276.8
12.5°	1080.3	999.1	815.9	638.9	476.1	330.1	232.2	176.7	149.0	139.4	134.8
15°	1044.5	945.0	722.0	509.2	322.4	188.7	126.9	108.1	103.7	103.7	103.1
17.5°	1010.5	891.9	631.5	387.5	202.4	115.4	96.5	94.1	94.1	95.1	95.1
20°	978.0	841.3	543.9	278.1	127.4	91.6	87.3	86.7	87.3	88.6	88.6
22.5°	950.1	795.3	462.2	190.9	94.6	82.6	80.4	79.6	79.8	80.7	81.2
25°	929.3	756.5	385.1	129.3	81.5	75.2	72.8	71.4	70.3	70.3	70.8
27.5°	916.2	723.7	310.4	94.1	73.3	68.4	64.5	62.4	59.9	58.5	59.0
30°	906.6	692.5	240.4	76.8	65.7	60.7	55.8	52.2	48.7	47.0	47.6
32.5°	903.1	667.3	179.7	67.8	58.8	53.3	47.3	42.6	38.8	37.4	37.8
35°	912.7	647.4	131.6	61.3	53.3	46.5	39.7	34.4	31.5	30.6	30.9
37.5°	937.8	636.7	98.5	55.8	48.4	40.7	33.1	28.2	26.2	26.2	26.5
40°	985.4	636.4	79.1	52.0	44.1	35.3	27.3	23.8	22.7	23.3	23.5
42.5°	1054.8	650.9	68.9	48.4	40.2	30.1	22.7	20.2	20.0	20.5	20.8
45°	1149.7	677.4	63.4	45.4	36.1	25.2	19.1	17.5	17.5	18.3	18.6
47.5°	1266.0	716.2	58.8	42.4	32.0	21.0	16.4	15.3	15.6	16.4	16.6
50°	1406.0	765.3	54.2	39.1	29.0	17.5	14.2	13.4	13.7	14.7	15.1
52.5°	1565.5	831.2	50.3	36.1	25.2	14.5	12.0	11.5	12.0	13.2	13.4
55°	1702.2	890.2	45.7	33.6	20.2	12.0	9.9	9.9	10.4	11.8	12.0
57.5°	1833.8	952.0	41.6	29.0	15.9	9.6	8.2	8.4	9.3	10.7	10.9
60°	2026.9	1056.7	36.7	24.3	12.0	7.6	6.9	7.1	8.2	9.6	9.9
62.5°	2354.8	1216.2	31.7	20.2	9.3	6.0	5.5	6.0	7.4	9.0	9.3
65°	2650.7	1281.1	26.0	17.0	7.1	4.6	4.6	5.5	7.1	8.8	9.0
67.5°	2485.8	1078.3	20.2	13.4	5.5	3.6	3.8	5.2	6.9	8.8	9.0
69°	2198.3	881.8	17.2	10.7	4.6	3.3	3.6	5.2	6.9	8.4	8.8
70°	1974.4	744.5	15.3	9.0	4.1	3.3	3.6	4.9	6.9	8.4	8.8
72.5°	1322.4	402.0	12.3	6.5	3.8	3.0	3.0	4.9	6.5	8.2	8.4
75°	568.3	111.0	9.9	4.6	3.3	2.7	2.7	4.6	6.3	7.9	8.4
77.5°	103.9	28.2	7.9	4.1	3.3	2.7	2.5	4.4	6.0	7.6	7.9
80°	41.3	13.9	6.3	3.6	3.0	2.5	2.2	4.1	5.7	7.4	7.6
82.5°	24.9	7.9	5.2	3.3	3.0	2.2	1.9	3.6	5.5	7.1	7.4
85°	20.2	5.5	4.1	3.3	2.7	2.2	1.7	3.3	4.9	6.9	7.1
87.5°	9.9	3.8	3.8	3.0	2.7	2.2	1.7	3.0	4.6	6.5	6.9
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)