

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: P299221

Luminaire Tested: **GLNA-AF-02-LED-E1-SL2-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299221
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)
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-SL2-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Narrow OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6804.8 lumens
Efficiency: N/A
Efficacy: 103.1 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

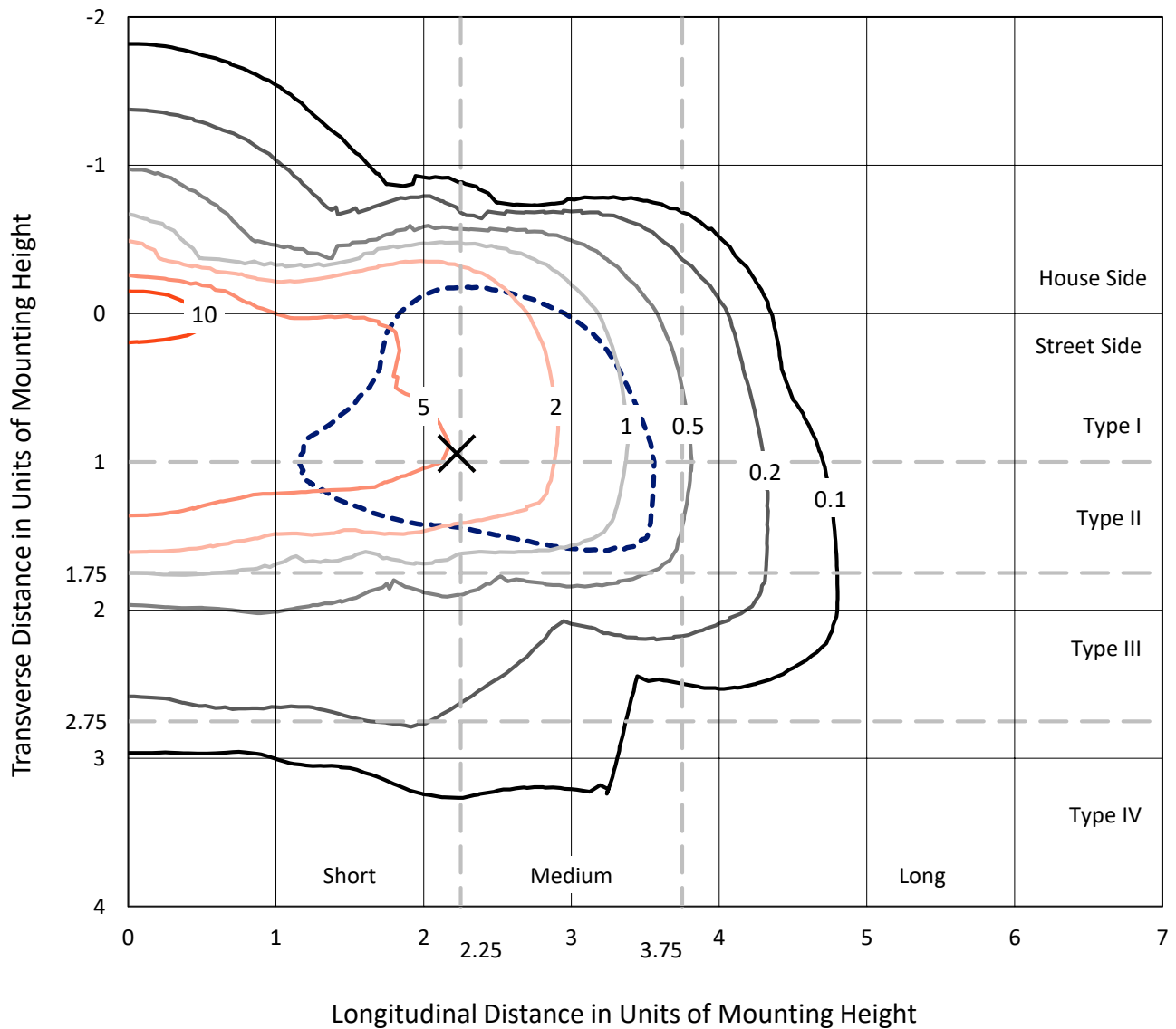
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

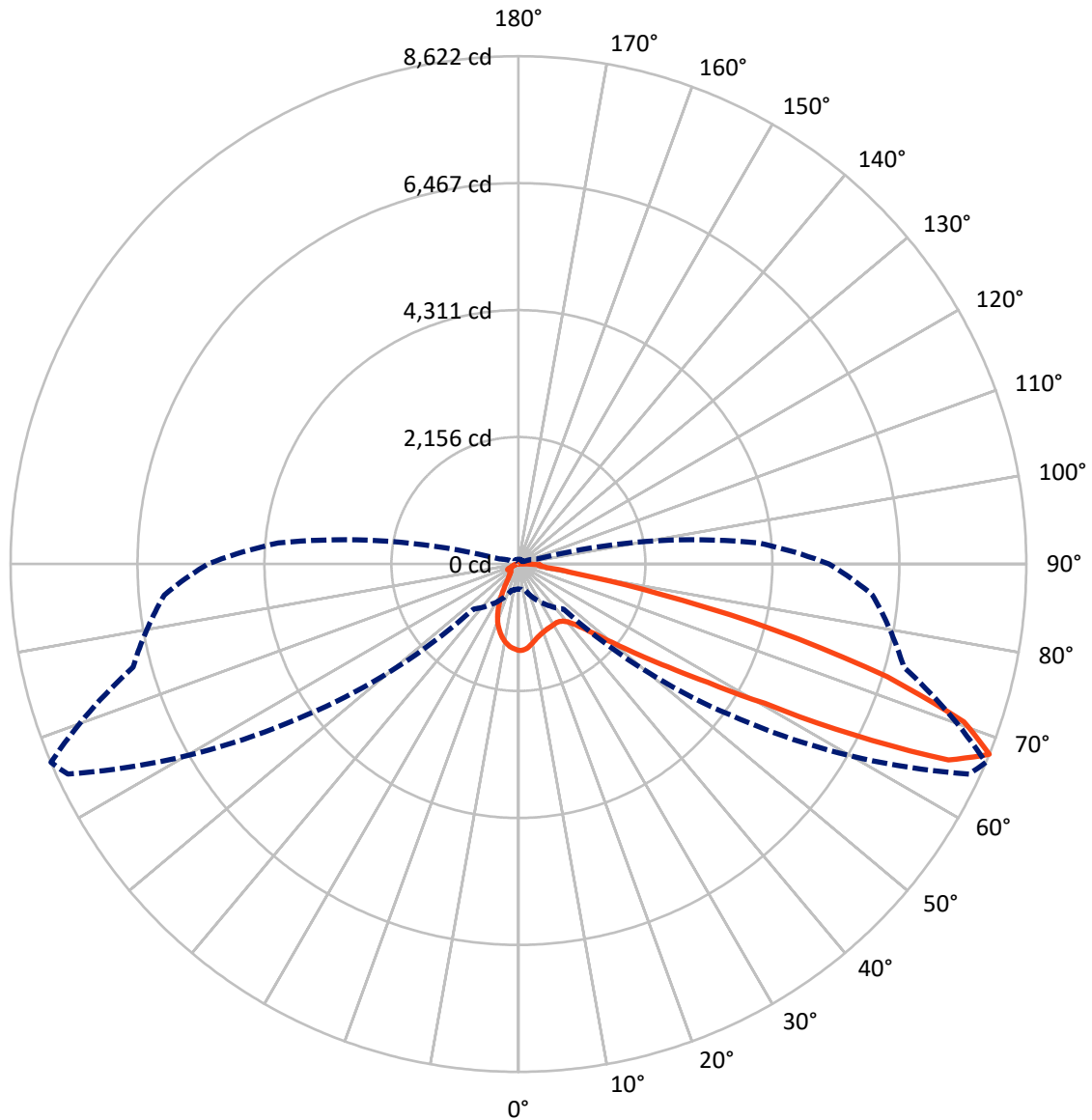
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.7 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1127.5	0.0	1127.5
	% Fixture	16.6	0.0	16.6
Street Side	Lumens	5677.4	0.0	5677.4
	% Fixture	83.4	0.0	83.4
Total	Lumens	6804.8	0.0	6804.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.2	1.8
10°-20°	289.8	4.3
20°-30°	392.8	5.8
30°-40°	558.3	8.2
40°-50°	934.1	13.7
50°-60°	1477.8	21.7
60°-70°	1882.6	27.7
70°-80°	986.1	14.5
80°-90°	158.1	2.3
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°	6804.8	100.0
0°-180°	6804.8	100.0

Coefficient of Utilization



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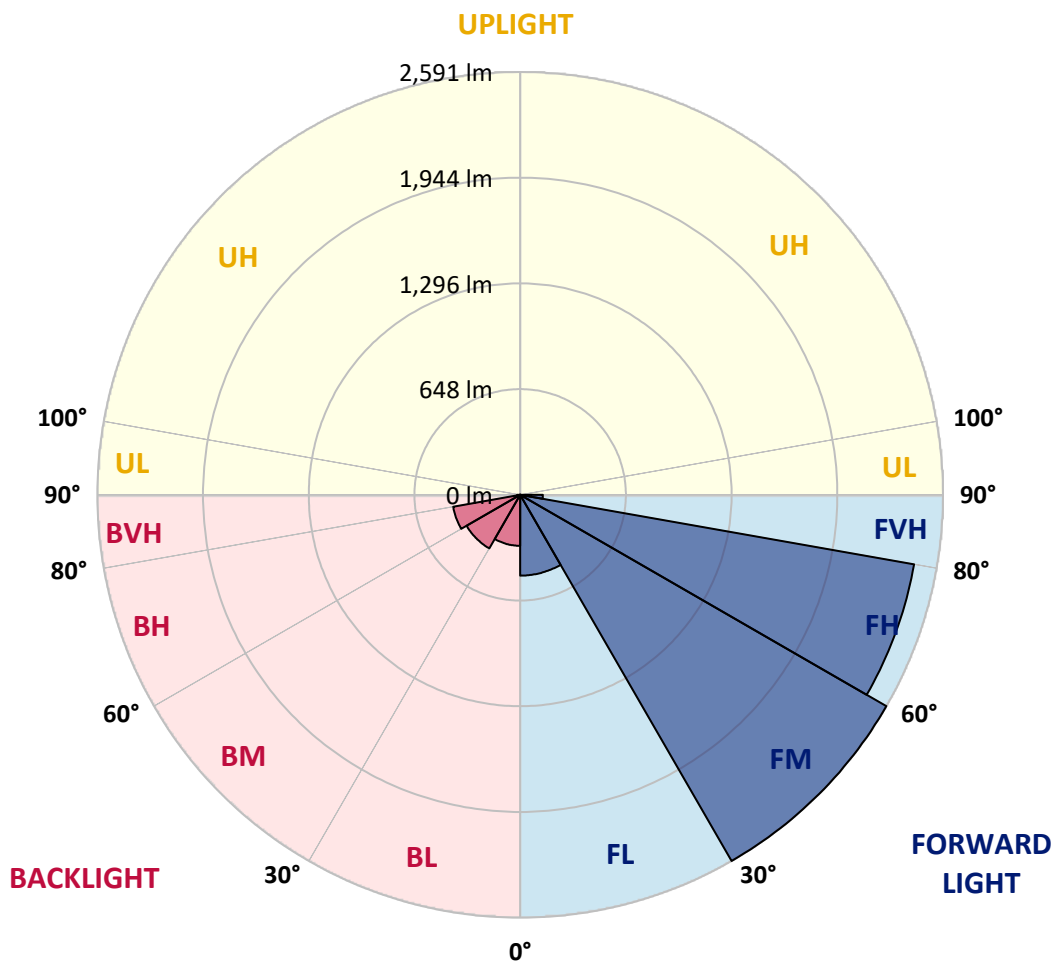
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	495.2	7.3			
FM (30°-60°)	2591.4	38.1			
FH (60°-80°)	2451.6	36.0			G2/5000
FVH (80°-90°)	139.1	2.0			G2/225
BL (0°-30°)	312.5	4.6	B1/500		
BM (30°-60°)	378.9	5.6	B1/1000		
BH (60°-80°)	417.0	6.1	B1/500		G1/500
BVH (80°-90°)	19.1	0.3			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8
2.5°	1407.4	1409.7	1417.1	1421.8	1443.0	1452.0	1458.4	1464.8	1465.8	1468.8	1465.8
5°	1259.7	1264.8	1278.5	1294.0	1334.9	1367.1	1401.0	1436.2	1442.6	1465.4	1471.8
7.5°	1145.3	1144.0	1155.4	1173.8	1215.8	1260.4	1319.8	1389.9	1403.7	1455.0	1479.9
10°	1061.7	1060.7	1072.8	1091.9	1131.9	1174.2	1241.3	1337.2	1356.7	1438.6	1487.6
12.5°	1000.0	1000.3	1012.4	1033.6	1074.2	1116.8	1184.9	1286.2	1311.1	1419.5	1495.6
15°	959.1	961.7	971.5	994.0	1033.6	1076.2	1143.0	1248.0	1275.8	1404.4	1504.7
17.5°	945.3	949.7	953.0	969.5	1003.4	1046.0	1111.4	1219.8	1249.3	1394.0	1512.8
20°	958.1	963.1	956.7	962.4	983.9	1021.5	1086.6	1197.7	1227.9	1382.2	1513.8
22.5°	1012.8	1017.5	998.7	982.2	980.9	1003.7	1066.1	1180.2	1211.4	1373.5	1514.1
25°	1109.1	1112.1	1080.5	1042.3	1005.0	997.3	1051.7	1168.1	1201.3	1365.8	1507.7
27.5°	1227.2	1229.5	1193.3	1136.9	1062.1	1012.4	1046.6	1161.1	1195.6	1359.1	1497.0
30°	1370.8	1381.9	1333.2	1262.1	1153.0	1057.0	1056.7	1157.4	1189.3	1347.7	1475.8
32.5°	1517.8	1522.5	1488.9	1416.8	1275.5	1135.6	1084.9	1160.1	1187.6	1333.9	1449.0
35°	1666.8	1672.8	1651.0	1593.0	1443.0	1250.7	1139.9	1175.8	1198.0	1329.2	1430.2
37.5°	1859.7	1867.8	1837.6	1770.5	1646.6	1406.7	1231.5	1215.4	1229.9	1342.6	1424.5
40°	2164.8	2161.1	2072.8	1972.8	1869.5	1606.4	1362.4	1282.6	1290.9	1385.9	1441.9
42.5°	2519.8	2510.7	2358.7	2201.7	2114.4	1848.0	1535.6	1399.0	1397.3	1471.1	1503.4
45°	2803.0	2795.6	2658.7	2465.1	2395.3	2123.2	1759.4	1572.5	1560.1	1606.4	1616.8
47.5°	2956.4	2956.7	2877.9	2719.8	2718.1	2472.8	2047.0	1823.5	1802.0	1823.8	1812.8
50°	2902.7	2909.7	2901.3	2851.0	3012.8	2931.2	2422.5	2173.5	2130.2	2151.7	2109.1
52.5°	2643.0	2652.0	2701.7	2778.9	3136.6	3485.2	2974.2	2608.4	2558.1	2550.3	2503.0
55°	2182.6	2193.6	2295.0	2504.7	3033.6	3857.4	3844.6	3162.8	3082.6	3009.7	2989.6
57.5°	1504.4	1522.8	1685.9	1997.3	2700.3	3969.8	4881.2	3953.0	3789.9	3535.6	3540.3
60°	848.0	869.5	1061.7	1344.6	2027.9	3847.7	5669.8	5150.0	4805.7	4151.3	4186.2
62.5°	539.3	562.4	708.4	934.2	1216.8	3189.9	5993.0	6814.1	6376.8	4910.4	4944.6
65°	436.6	446.6	515.4	771.1	883.6	1921.8	5747.7	8184.9	8021.8	5873.8	5714.1
67.5°	426.2	429.5	465.1	647.3	847.3	1080.2	4584.6	8441.3	8622.2	6773.5	6034.6
70°	421.1	432.9	524.2	617.8	811.4	911.1	2755.0	7738.6	8024.2	7008.7	5608.1
72.5°	204.4	203.7	263.8	558.7	914.1	945.0	1415.4	6261.4	6548.0	6072.2	4608.4
75°	164.8	150.7	144.0	204.7	878.9	975.8	902.0	4308.4	4515.8	4071.1	2832.9
77.5°	156.4	139.6	127.9	128.2	371.5	1034.9	764.1	2384.6	2445.0	1838.9	776.2
80°	129.5	114.1	105.7	119.1	179.9	985.6	826.2	1079.2	990.3	451.7	258.4
82.5°	89.9	81.9	79.5	100.0	144.0	702.3	960.7	579.9	486.2	226.2	159.4
85°	57.4	49.0	54.4	72.8	112.1	324.2	989.6	452.0	359.4	143.6	89.9
87.5°	26.5	21.5	26.8	40.3	73.2	111.7	941.6	507.7	370.1	75.8	56.7
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°	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8	1467.8
2.5°	1468.5	1462.1	1457.0	1447.7	1437.2	1427.2	1418.1	1406.7	1403.4	1400.3	1405.0
5°	1473.2	1466.8	1448.3	1419.5	1387.6	1357.7	1327.9	1302.3	1286.6	1277.9	1282.9
7.5°	1480.2	1471.1	1432.9	1379.9	1322.5	1270.1	1216.1	1172.8	1140.9	1125.8	1130.2
10°	1486.6	1469.1	1406.7	1327.2	1243.3	1165.4	1080.2	1009.7	957.4	929.9	936.6
12.5°	1489.3	1461.4	1370.1	1261.4	1146.3	1032.2	906.7	801.3	726.2	698.7	693.0
15°	1491.9	1452.7	1329.9	1186.6	1029.2	867.8	691.9	565.8	503.4	489.6	486.6
17.5°	1492.6	1437.6	1284.2	1105.4	891.9	672.1	473.2	393.0	393.3	415.4	418.1
20°	1485.6	1415.1	1228.9	1004.4	727.5	464.8	324.8	311.1	361.7	417.1	423.8
22.5°	1469.5	1385.2	1166.1	886.6	539.3	306.0	251.3	266.4	331.9	399.7	407.4
25°	1449.0	1349.0	1091.9	750.0	357.0	218.8	210.7	229.2	273.5	318.8	323.2
27.5°	1421.1	1306.0	1008.7	593.6	231.9	180.2	185.6	198.0	216.1	236.2	238.3
30°	1385.2	1254.7	919.8	432.9	175.2	162.1	169.8	176.5	184.2	195.6	196.6
32.5°	1344.0	1205.4	828.5	299.0	155.4	152.7	158.7	162.1	168.1	175.2	175.8
35°	1309.4	1158.4	733.9	211.4	147.0	145.6	149.7	151.0	156.7	164.4	165.1
37.5°	1289.6	1120.1	636.2	170.5	141.3	139.3	141.6	141.6	149.7	161.1	162.8
40°	1290.9	1099.0	538.6	154.0	136.6	133.9	134.2	134.2	144.6	157.0	158.1
42.5°	1327.5	1104.4	452.0	147.7	132.9	129.9	128.2	129.2	137.9	146.0	146.6
45°	1413.4	1142.3	370.8	143.6	129.2	128.2	124.5	124.2	127.5	131.2	131.2
47.5°	1554.4	1217.1	315.8	140.9	126.2	125.8	121.5	117.1	116.8	118.1	118.1
50°	1783.6	1346.0	278.9	137.9	124.2	121.5	116.4	109.7	107.4	108.4	108.4
52.5°	2127.2	1575.8	264.8	133.9	119.8	115.4	109.7	103.0	101.0	101.3	101.3
55°	2577.9	1928.9	262.8	129.2	115.1	108.1	103.4	98.3	96.0	96.6	96.6
57.5°	3128.5	2417.1	298.7	121.8	108.7	100.7	98.0	94.6	93.0	94.0	93.6
60°	3798.0	3056.0	443.0	114.1	102.3	94.0	94.0	91.3	89.9	90.9	90.6
62.5°	4569.1	3789.9	622.8	108.4	95.6	88.6	89.9	88.6	87.2	87.9	87.6
65°	5253.0	4268.1	583.2	104.0	88.9	83.6	85.9	85.2	84.2	84.9	84.6
67.5°	5272.8	4090.9	327.5	99.3	82.6	78.5	81.9	81.5	80.9	81.5	81.2
70°	4705.7	3454.4	184.6	90.6	75.8	72.5	77.2	76.8	76.2	77.5	77.2
72.5°	3770.1	2506.7	134.9	79.9	69.1	66.1	71.5	71.1	71.1	73.2	72.1
75°	2169.5	1289.9	107.7	68.5	62.1	59.7	64.4	64.8	65.4	68.1	66.1
77.5°	618.5	402.0	87.9	58.1	53.4	52.3	57.0	57.7	58.1	61.1	58.4
80°	229.9	185.2	72.5	48.7	43.6	44.0	48.3	49.3	49.7	52.7	49.3
82.5°	146.6	122.1	58.7	37.6	34.2	33.9	39.3	40.6	40.6	40.9	38.9
85°	85.6	73.2	44.3	27.2	24.2	23.2	29.2	31.5	30.5	29.9	28.5
87.5°	57.4	50.3	27.2	15.1	13.1	12.4	17.1	18.8	18.1	17.1	16.1
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)