

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: P299464

Luminaire Tested: **GLNA-AF-02-LED-E1-5NQ-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299464
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)
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-E1-5NQ-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8247.1 lumens
Efficiency: N/A
Efficacy: 125.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

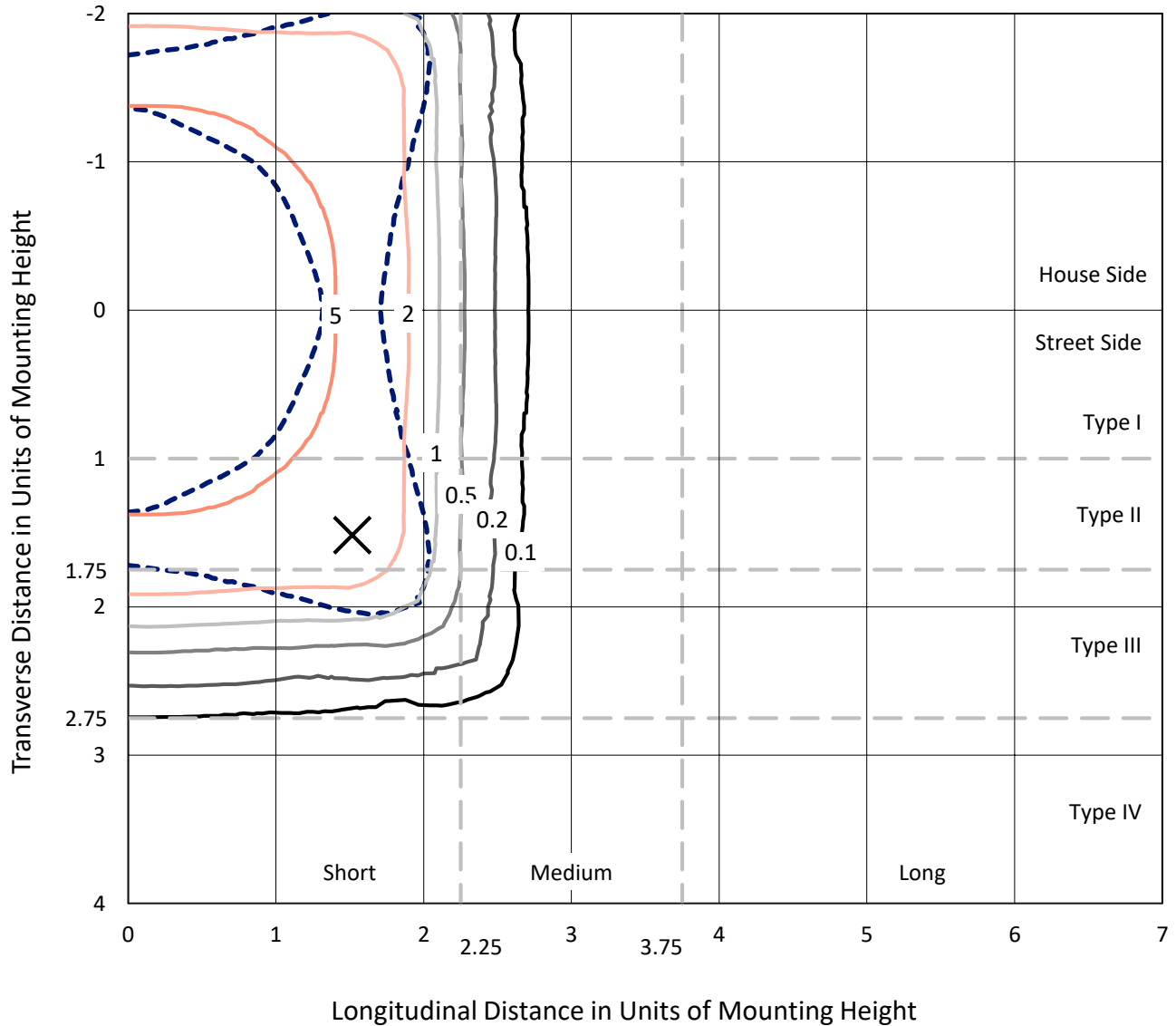
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P299464
 CATALOG NUMBER: GLNA-AF-02-LED-E1-5NQ-600

Iso-Footcandle Lines of Horizontal Illumination

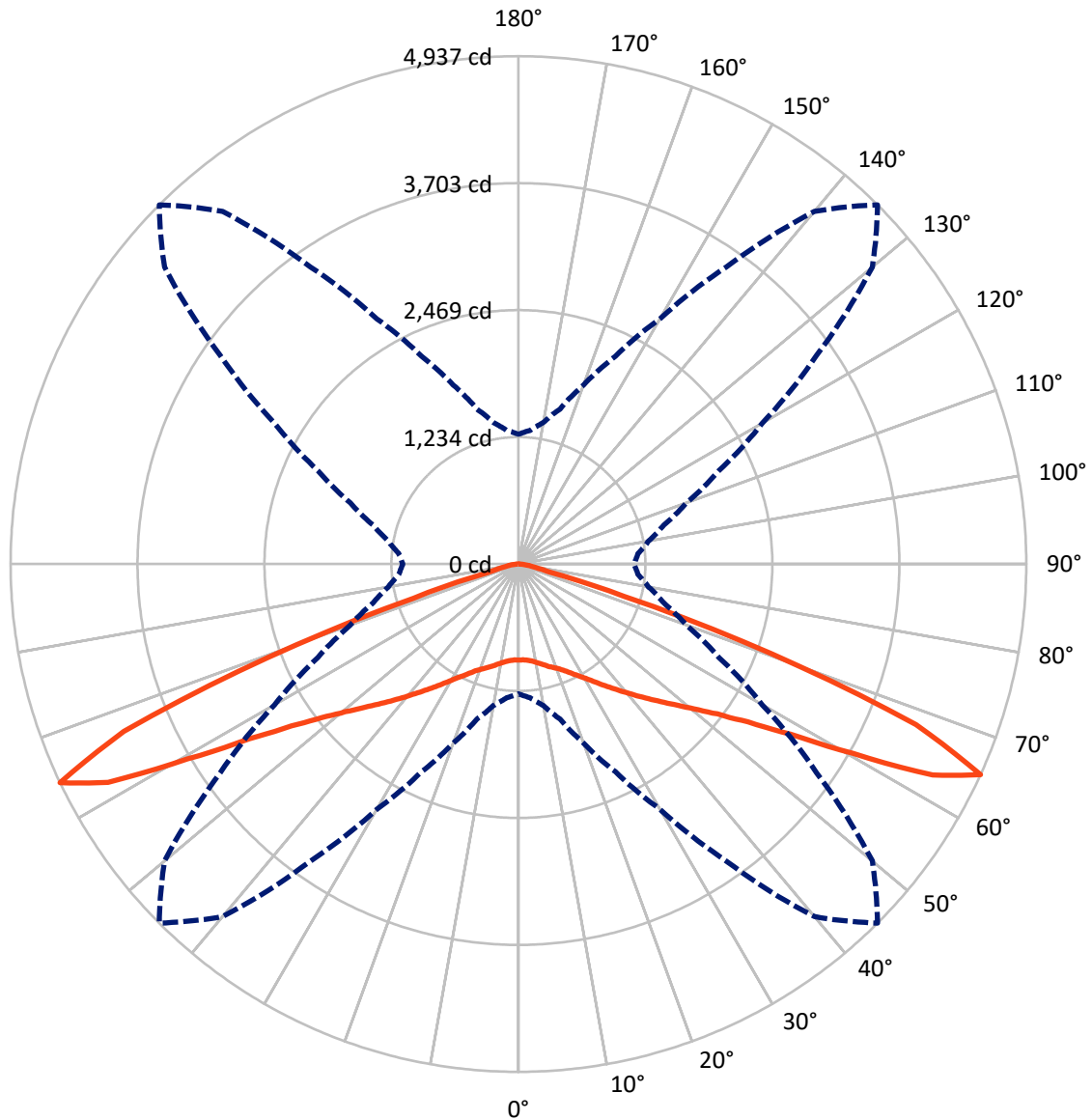
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.3 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P299464
CATALOG NUMBER: GLNA-AF-02-LED-E1-5NQ-600

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P299464

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4123.5	0.0	4123.5
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	4123.5	0.0	4123.5
	% Fixture	50.0	0.0	50.0
Total	Lumens	8247.1	0.0	8247.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.0	1.1
10°-20°	291.7	3.5
20°-30°	545.4	6.6
30°-40°	922.5	11.2
40°-50°	1508.3	18.3
50°-60°	2398.5	29.1
60°-70°	2168.1	26.3
70°-80°	274.4	3.3
80°-90°	47.2	0.6
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°	8247.1	100.0
0°-180°	8247.1	100.0

Coefficient of Utilization



REPORT NUMBER: P299464

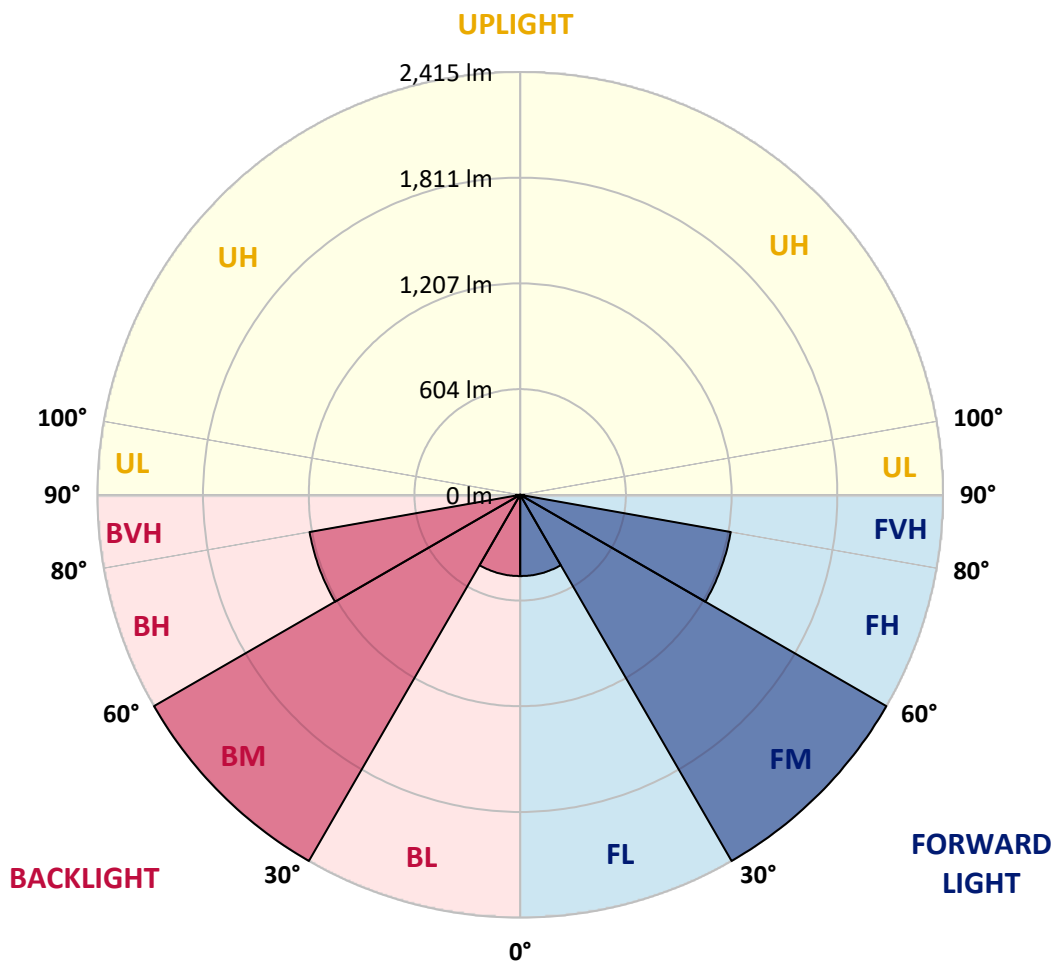
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	464.0	5.6			
FM	(30°-60°)	2414.7	29.3			
FH	(60°-80°)	1221.2	14.8			G1/1800
FVH	(80°-90°)	23.6	0.3			G1/100
BL	(0°-30°)	464.0	5.6	B1/500		
BM	(30°-60°)	2414.7	29.3	B2/2500		
BH	(60°-80°)	1221.2	14.8	B3/2500		G1/1800
BVH	(80°-90°)	23.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short





REPORT NUMBER: P299464

CATALOG NUMBER: GLNA-AF-02-LED-E1-5NQ-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	933.2	933.2	933.2	933.2	933.2	933.2	933.2	933.2	933.2	933.2	933.2
2.5°	933.9	934.7	935.5	934.7	935.5	934.3	933.5	934.7	933.5	932.4	933.2
5°	942.0	942.4	942.4	941.3	942.4	941.7	940.5	942.0	940.9	939.7	940.5
7.5°	955.6	957.1	956.0	954.8	955.6	954.8	954.0	954.4	954.0	952.9	953.2
10°	973.7	974.9	974.1	973.7	974.5	974.1	973.3	972.9	973.3	972.2	972.2
12.5°	995.7	995.3	995.0	995.3	996.5	996.5	996.1	996.5	997.3	997.7	996.9
15°	1017.4	1018.1	1018.1	1018.1	1020.5	1022.4	1023.5	1024.3	1025.9	1026.2	1024.7
17.5°	1044.4	1044.4	1044.0	1044.4	1046.7	1049.8	1051.0	1052.5	1054.1	1055.2	1053.3
20°	1074.5	1075.3	1075.3	1076.1	1079.2	1082.6	1082.6	1083.4	1082.6	1083.4	1082.3
22.5°	1111.2	1113.5	1113.5	1113.9	1117.0	1121.3	1120.1	1121.3	1119.3	1120.9	1119.3
25°	1159.1	1162.6	1161.8	1161.8	1164.1	1166.8	1167.2	1169.5	1169.2	1171.1	1169.9
27.5°	1213.2	1218.6	1220.1	1219.8	1221.3	1224.0	1224.8	1227.5	1225.9	1227.5	1226.7
30°	1278.1	1280.4	1283.5	1284.6	1286.6	1289.3	1289.3	1289.7	1287.7	1290.1	1291.2
32.5°	1345.3	1349.5	1352.6	1359.6	1363.1	1365.0	1364.6	1365.4	1363.4	1366.5	1368.8
35°	1434.1	1437.2	1442.2	1447.6	1452.3	1451.9	1450.7	1451.1	1451.1	1453.8	1456.1
37.5°	1541.1	1541.9	1548.4	1556.2	1558.5	1556.2	1549.2	1547.7	1544.2	1547.7	1551.5
40°	1654.3	1657.0	1670.1	1675.1	1676.3	1672.0	1662.0	1656.2	1648.5	1652.7	1658.1
42.5°	1772.9	1778.3	1790.2	1799.1	1803.0	1800.3	1786.4	1777.5	1767.4	1769.8	1775.2
45°	1904.2	1910.7	1927.7	1936.2	1943.6	1939.3	1925.8	1912.3	1896.5	1897.6	1906.1
47.5°	2050.9	2057.5	2079.5	2093.8	2097.7	2096.9	2081.8	2063.3	2041.7	2040.9	2048.2
50°	2215.5	2222.1	2249.5	2271.5	2282.7	2281.5	2263.8	2237.5	2211.2	2211.6	2220.9
52.5°	2376.2	2384.3	2412.9	2450.7	2472.7	2488.6	2477.7	2453.0	2421.0	2421.7	2430.2
55°	2526.8	2540.3	2573.1	2624.5	2665.5	2709.9	2722.6	2721.9	2702.5	2707.9	2716.4
57.5°	2599.8	2619.9	2670.5	2751.6	2835.0	2925.4	3001.9	3059.0	3083.4	3120.1	3111.6
60°	2461.5	2493.6	2568.1	2687.5	2852.4	3040.9	3242.9	3440.3	3608.7	3735.7	3662.7
62.5°	2015.4	2057.1	2147.5	2300.5	2550.0	2851.6	3238.3	3704.8	4213.1	4519.8	4300.8
65°	1261.1	1304.3	1396.3	1560.0	1852.0	2227.1	2751.6	3524.9	4474.6	4937.0	4491.2
67.5°	491.7	515.2	565.1	669.7	889.1	1222.8	1749.3	2626.8	3762.8	4167.9	3692.9
70°	246.4	248.7	258.0	277.3	324.4	421.4	641.2	1217.8	2157.9	2606.4	2080.3
72.5°	178.1	178.4	183.1	191.6	206.6	228.3	270.0	372.7	701.8	1072.6	657.8
75°	136.3	137.9	140.6	145.2	153.3	164.2	179.2	214.8	266.1	308.6	259.6
77.5°	105.1	108.1	110.1	114.3	119.3	126.7	130.9	144.5	168.0	176.9	174.2
80°	80.0	82.7	86.9	90.4	93.9	97.3	95.8	102.0	114.3	121.7	117.8
82.5°	51.0	54.1	66.4	69.5	71.1	73.4	70.7	71.1	76.5	81.1	76.5
85°	32.8	34.8	42.1	46.0	46.3	47.9	46.7	44.0	44.0	40.2	45.2
87.5°	15.1	15.4	18.9	22.4	23.2	20.9	20.5	19.7	15.8	15.1	16.2
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: P299464

CATALOG NUMBER: GLNA-AF-02-LED-E1-5NQ-600

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	933.2	933.2	933.2	933.2	933.2	933.2	933.2	933.2
2.5°	932.8	933.5	933.9	935.1	935.5	935.5	935.9	936.6
5°	940.1	941.3	941.7	943.2	943.6	943.2	944.0	944.4
7.5°	953.2	955.2	956.0	957.5	956.3	957.9	958.3	958.3
10°	972.6	974.5	974.9	976.4	975.6	976.4	976.4	975.6
12.5°	998.1	998.4	997.3	998.4	996.9	997.7	996.5	995.7
15°	1026.2	1025.1	1022.4	1022.4	1020.1	1020.5	1020.1	1019.7
17.5°	1053.7	1051.4	1049.4	1048.6	1046.7	1046.3	1045.2	1045.2
20°	1083.8	1082.6	1081.5	1079.9	1078.0	1076.1	1075.7	1076.5
22.5°	1120.1	1119.7	1119.7	1118.9	1116.2	1114.3	1113.2	1113.2
25°	1168.8	1165.3	1165.3	1164.9	1163.7	1162.6	1160.3	1161.4
27.5°	1223.6	1221.7	1223.2	1222.8	1221.7	1221.7	1220.1	1220.1
30°	1291.2	1290.4	1292.8	1290.8	1287.0	1286.6	1285.0	1283.1
32.5°	1369.2	1368.5	1371.9	1369.6	1363.4	1360.0	1356.9	1355.3
35°	1456.1	1456.5	1460.8	1459.2	1452.3	1450.0	1444.5	1443.8
37.5°	1551.2	1557.3	1564.7	1566.2	1560.4	1558.9	1553.1	1550.0
40°	1662.8	1670.9	1682.1	1684.8	1678.6	1677.5	1669.3	1665.1
42.5°	1781.7	1795.6	1809.5	1811.9	1805.7	1799.5	1791.8	1788.7
45°	1914.6	1931.2	1949.4	1954.0	1944.7	1937.4	1927.4	1927.4
47.5°	2063.7	2084.6	2105.0	2117.8	2109.3	2101.5	2089.6	2081.8
50°	2239.8	2268.4	2295.1	2308.2	2294.7	2280.0	2259.1	2252.2
52.5°	2460.8	2491.7	2514.8	2507.9	2487.0	2466.5	2443.8	2434.5
55°	2742.7	2753.1	2753.1	2726.9	2685.2	2650.8	2614.9	2602.9
57.5°	3095.3	3055.2	2993.4	2915.0	2816.5	2730.7	2672.8	2645.4
60°	3509.8	3316.7	3098.4	2884.1	2707.9	2562.7	2476.6	2437.2
62.5°	3786.0	3280.7	2843.5	2499.4	2246.0	2071.0	1952.1	1905.7
65°	3538.4	2736.1	2150.6	1738.9	1462.7	1284.6	1166.8	1123.6
67.5°	2591.7	1714.5	1145.2	820.8	601.4	479.7	431.4	411.3
70°	1163.4	603.7	370.0	288.9	249.1	228.7	219.8	216.7
72.5°	350.7	253.8	214.0	193.1	177.3	167.2	159.9	159.1
75°	211.7	176.1	156.4	144.1	134.0	125.9	122.1	120.9
77.5°	147.9	129.4	120.1	111.2	103.5	97.3	93.9	91.2
80°	103.9	95.0	90.8	85.7	80.7	74.9	69.9	67.6
82.5°	69.5	67.6	67.6	64.5	60.3	54.8	44.8	42.5
85°	44.8	44.4	45.2	44.0	40.9	35.1	29.0	27.4
87.5°	20.9	21.2	23.6	23.2	22.4	18.5	14.7	13.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)