

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: P299219

Luminaire Tested: **GLNA-AF-01-LED-E1-T3-7050-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299219  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)  
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-T3-7050-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 5000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4092.4 lumens  
Efficiency: N/A  
Efficacy: 120.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1

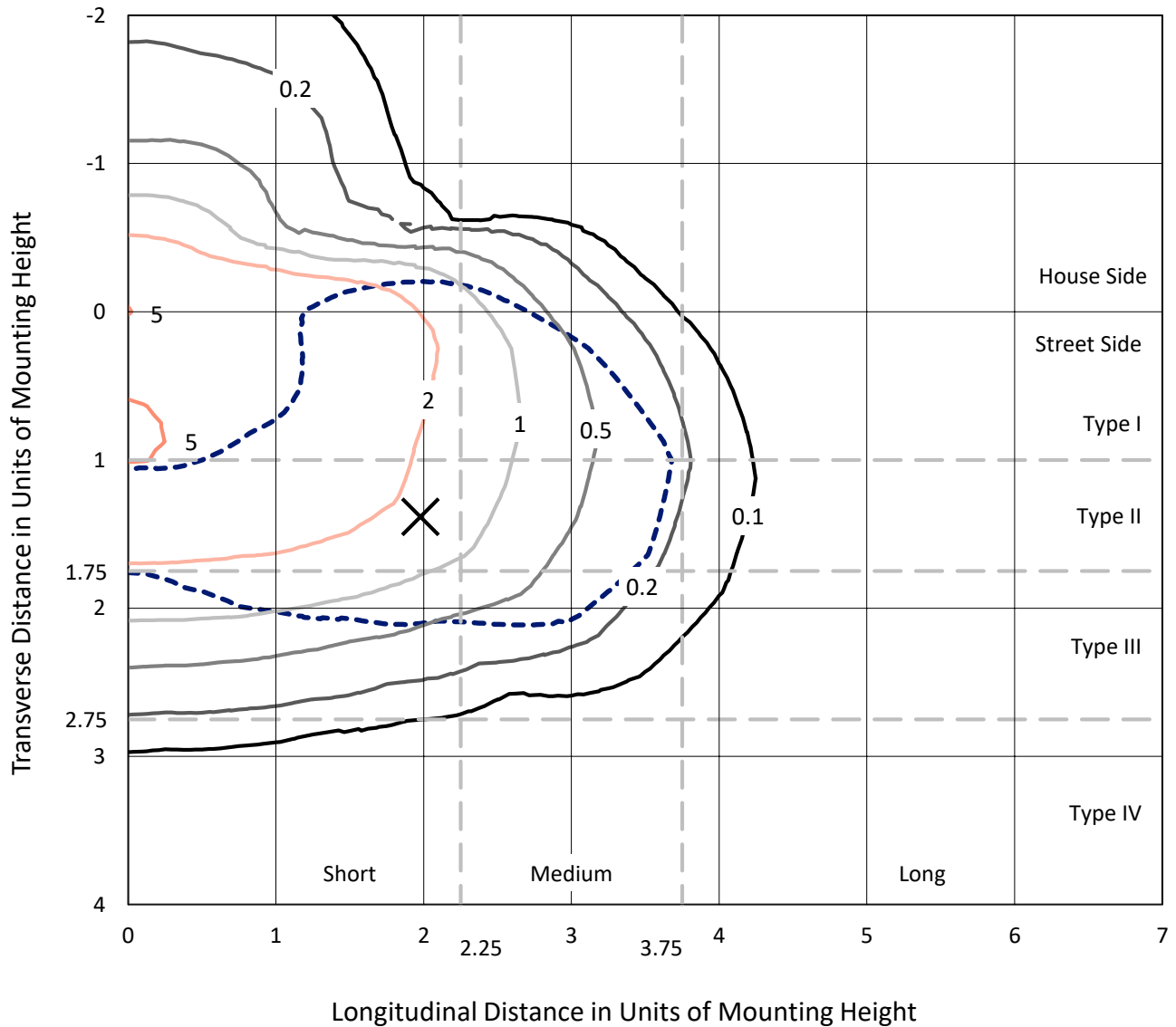
Input Watts (W): 34  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

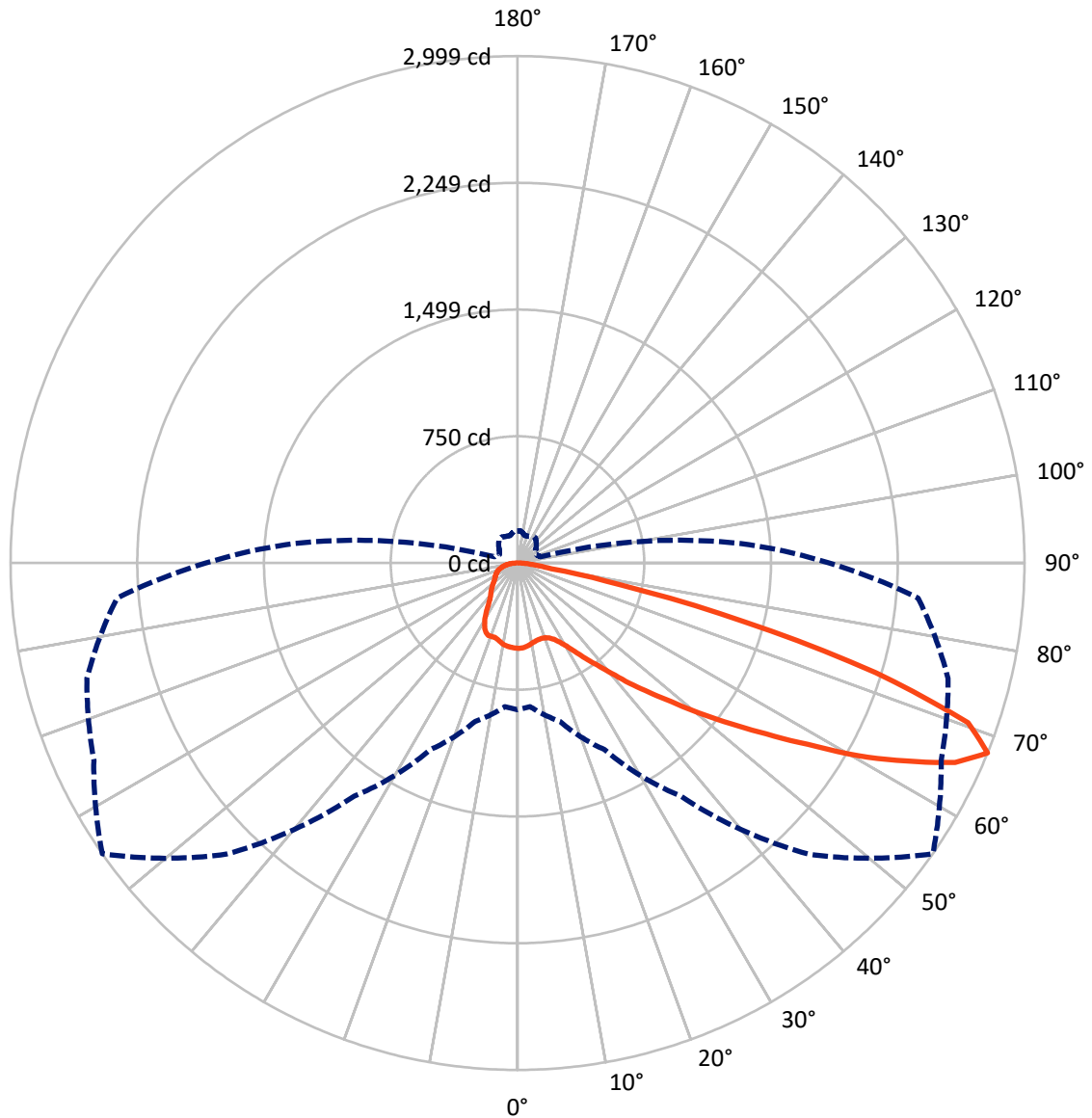


Based on 10 foot mounting height. Maximum calculated value = 5.2 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	884.0	0.0	884.0
	% Fixture	21.6	0.0	21.6
<b>Street Side</b>	Lumens	3208.3	0.0	3208.3
	% Fixture	78.4	0.0	78.4
<b>Total</b>	Lumens	4092.4	0.0	4092.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.1	1.2
10°-20°	133.4	3.3
20°-30°	223.5	5.5
30°-40°	367.5	9.0
40°-50°	618.6	15.1
50°-60°	973.6	23.8
60°-70°	1161.9	28.4
70°-80°	498.9	12.2
80°-90°	68.0	1.7
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°	4092.4	100.0
0°-180°	4092.4	100.0



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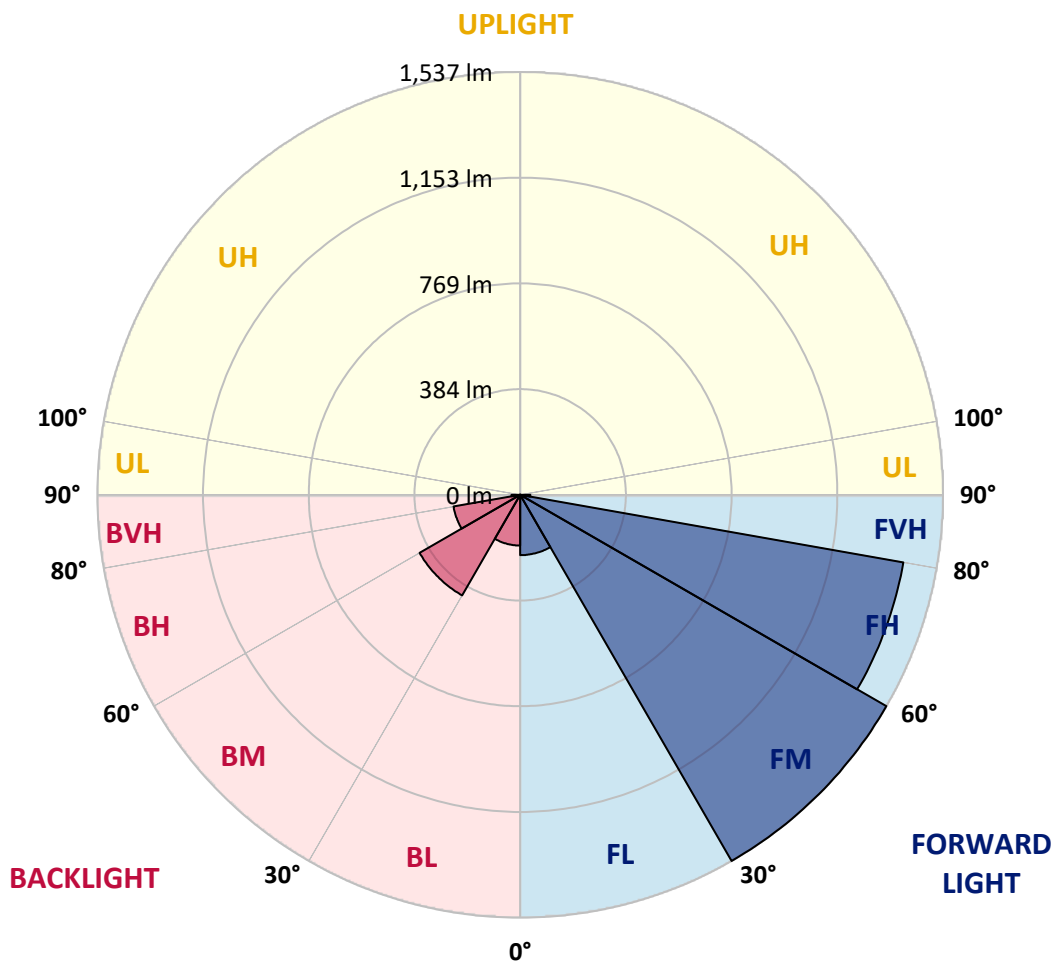
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	219.4	5.4			
FM	(30°-60°)	1537.4	37.6			
FH	(60°-80°)	1414.8	34.6			G1/1800
FVH	(80°-90°)	36.8	0.9			G1/100
BL	(0°-30°)	184.6	4.5	B1/500		
BM	(30°-60°)	422.2	10.3	B1/1000		
BH	(60°-80°)	246.0	6.0	B1/500		G1/500
BVH	(80°-90°)	31.2	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	504.6	504.6	504.6	504.6	504.6	504.6	504.6	504.6	504.6	504.6	504.6
2.5°	500.3	500.5	500.9	502.5	503.8	503.4	503.6	502.9	502.7	501.5	502.7
5°	494.0	494.6	494.8	497.3	498.9	499.3	498.7	497.7	496.5	495.3	495.9
7.5°	479.5	481.1	481.3	484.9	487.4	490.8	491.0	491.2	490.6	489.8	491.0
10°	470.4	470.8	470.6	473.2	475.2	478.9	481.1	484.9	486.4	486.8	487.6
12.5°	469.8	469.5	468.9	468.9	468.3	469.8	473.8	479.1	482.9	484.1	485.1
15°	476.2	476.0	474.0	471.0	467.3	466.1	469.5	475.4	480.3	482.9	483.9
17.5°	490.4	489.2	486.1	479.3	471.2	468.1	468.5	473.4	479.1	482.5	483.5
20°	516.5	516.5	509.8	497.1	482.7	475.2	471.6	474.6	480.1	484.7	486.1
22.5°	561.6	562.0	550.7	529.9	505.6	489.6	480.7	480.1	486.6	491.8	493.4
25°	625.4	623.8	608.0	578.4	541.4	514.9	499.5	495.9	501.5	507.2	509.2
27.5°	699.7	694.0	675.2	639.4	591.6	552.9	529.1	523.4	528.7	535.3	537.2
30°	773.3	767.3	745.0	705.9	652.7	603.7	569.7	560.4	567.9	577.2	578.4
32.5°	846.8	846.8	821.9	776.2	718.3	664.3	623.6	612.6	625.0	636.3	638.8
35°	934.7	935.1	911.0	856.1	793.8	736.7	691.8	683.7	702.5	710.4	716.5
37.5°	1042.9	1045.0	1014.0	947.6	879.4	819.3	765.9	754.9	773.7	795.2	815.0
40°	1159.7	1162.5	1128.3	1046.4	978.2	915.4	857.7	837.7	868.9	910.0	935.5
42.5°	1271.2	1285.4	1252.4	1168.2	1094.9	1029.8	971.3	942.3	981.4	1043.5	1065.6
45°	1432.3	1442.5	1385.0	1308.7	1239.7	1167.0	1089.5	1058.9	1113.6	1191.9	1196.5
47.5°	1539.6	1531.9	1502.6	1455.2	1411.5	1343.5	1226.9	1193.3	1266.0	1358.1	1332.6
50°	1596.7	1599.1	1595.1	1597.9	1599.5	1556.8	1395.3	1349.2	1436.0	1547.3	1488.6
52.5°	1650.1	1634.3	1647.3	1712.2	1790.4	1774.6	1578.5	1530.5	1618.3	1757.2	1653.5
55°	1648.9	1624.8	1667.3	1781.7	1951.5	1969.7	1784.3	1729.0	1811.0	1982.4	1828.2
57.5°	1590.6	1591.8	1657.2	1807.0	2063.8	2153.1	2023.1	1940.1	2015.4	2210.5	1987.7
60°	1510.3	1521.2	1615.5	1802.9	2153.7	2303.6	2316.0	2167.6	2215.6	2417.8	2119.7
62.5°	1380.9	1392.3	1522.4	1759.8	2140.1	2448.5	2580.9	2425.7	2424.9	2543.5	2158.5
65°	1176.7	1173.3	1309.9	1598.7	2025.7	2555.6	2844.0	2648.9	2582.7	2545.5	2080.6
67.5°	867.7	852.7	969.9	1217.6	1683.7	2435.6	2998.8	2765.1	2636.4	2378.1	1842.6
70°	450.3	435.3	530.1	711.0	1107.3	1900.9	2827.4	2705.0	2517.6	1993.4	1443.5
72.5°	192.5	190.0	228.5	311.9	535.7	1096.4	2217.0	2341.3	2160.3	1485.2	992.5
75°	129.5	128.7	143.1	170.0	241.0	444.9	1387.4	1662.0	1580.5	920.9	558.2
77.5°	101.6	100.6	109.1	122.2	156.2	175.5	615.7	892.3	825.8	400.9	244.3
80°	79.5	78.7	84.0	91.1	112.3	110.7	202.6	355.0	274.8	153.6	118.8
82.5°	62.7	62.7	67.0	67.2	79.7	75.5	105.7	156.4	137.2	89.5	72.7
85°	57.3	57.3	61.9	50.2	52.0	47.6	65.6	92.7	87.0	36.8	31.6
87.5°	28.9	28.1	52.0	44.5	28.3	25.3	32.0	44.9	48.2	20.4	15.8
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	504.6	504.6	504.6	504.6	504.6	504.6	504.6	504.6	504.6	504.6
2.5°	502.3	502.1	502.5	502.7	504.2	506.4	507.4	508.8	509.6	509.2
5°	496.3	496.7	498.3	499.5	502.3	505.8	507.8	509.4	510.8	510.2
7.5°	491.4	492.4	494.8	495.7	497.3	498.3	498.1	498.7	499.9	498.5
10°	488.6	489.8	491.6	490.2	486.4	481.1	476.2	473.6	474.4	473.4
12.5°	485.9	487.4	486.1	479.5	469.1	462.1	458.4	458.8	460.6	461.0
15°	484.3	484.9	478.9	466.7	456.0	455.0	457.0	456.6	456.8	456.8
17.5°	484.3	482.7	471.6	459.4	454.8	453.0	446.9	439.2	435.8	434.7
20°	486.8	482.7	469.3	461.1	451.3	436.0	419.8	405.6	399.3	397.5
22.5°	494.6	487.4	476.0	461.9	433.9	408.4	382.7	365.7	354.2	352.2
25°	510.2	502.3	489.2	451.5	406.2	369.8	340.6	321.6	310.1	308.6
27.5°	537.4	532.3	496.3	428.3	369.4	330.5	303.4	288.8	280.3	279.7
30°	578.6	576.0	492.8	394.1	324.2	292.3	279.3	270.8	264.5	264.3
32.5°	644.2	623.4	481.1	352.4	282.9	265.3	259.9	254.8	249.8	249.8
35°	728.6	661.8	459.0	307.8	257.8	250.2	243.5	235.4	228.9	228.5
37.5°	827.8	685.5	419.2	271.8	245.9	240.2	230.3	218.2	206.8	204.8
40°	928.0	692.6	363.3	249.6	238.4	230.1	218.0	203.8	192.7	192.1
42.5°	1019.9	679.0	304.0	234.4	230.9	219.8	207.2	194.5	185.8	185.6
45°	1097.0	643.6	254.2	220.0	223.0	210.5	199.2	189.0	182.2	180.9
47.5°	1169.6	593.6	219.2	204.8	215.1	205.4	195.9	186.2	179.7	178.7
50°	1253.8	539.6	194.7	190.0	208.1	203.6	198.7	188.6	177.7	176.5
52.5°	1355.8	493.0	175.5	176.9	202.8	206.0	205.8	195.3	176.3	174.7
55°	1469.6	441.2	161.1	166.2	200.6	210.3	207.5	201.6	177.5	175.1
57.5°	1581.7	380.7	151.0	158.1	197.5	209.9	199.0	190.5	180.3	176.9
60°	1665.7	299.5	143.3	151.0	190.5	203.4	189.8	178.5	179.7	177.1
62.5°	1671.2	231.5	134.0	144.9	180.1	196.9	183.6	173.2	182.2	179.9
65°	1573.0	174.9	125.1	137.6	168.8	192.7	177.7	170.2	187.6	185.0
67.5°	1324.3	140.7	117.6	130.1	157.5	184.0	172.4	167.4	192.3	187.8
70°	956.1	120.0	110.3	121.0	147.5	174.1	167.6	162.5	179.5	172.4
72.5°	588.6	104.0	102.0	108.9	139.7	163.9	160.5	153.2	161.7	156.0
75°	293.9	90.1	92.7	97.1	128.9	152.2	148.6	141.3	142.5	141.3
77.5°	140.7	77.1	81.8	85.2	114.8	139.0	135.2	127.7	126.3	126.5
80°	89.1	64.4	69.0	71.4	102.6	123.5	119.8	112.3	128.1	118.8
82.5°	55.7	52.4	53.6	57.9	89.3	107.5	102.6	95.9	115.4	91.3
85°	30.8	36.6	38.1	41.9	68.8	89.9	85.0	76.5	68.6	67.4
87.5°	18.4	21.7	22.3	25.1	46.3	65.0	57.5	54.6	45.3	45.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)