

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: P300420

Luminaire Tested: **GLNA-AF-01-LED-E1-T4FT-7050-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300420
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)
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-T4FT-7050-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 5000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4116.4 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

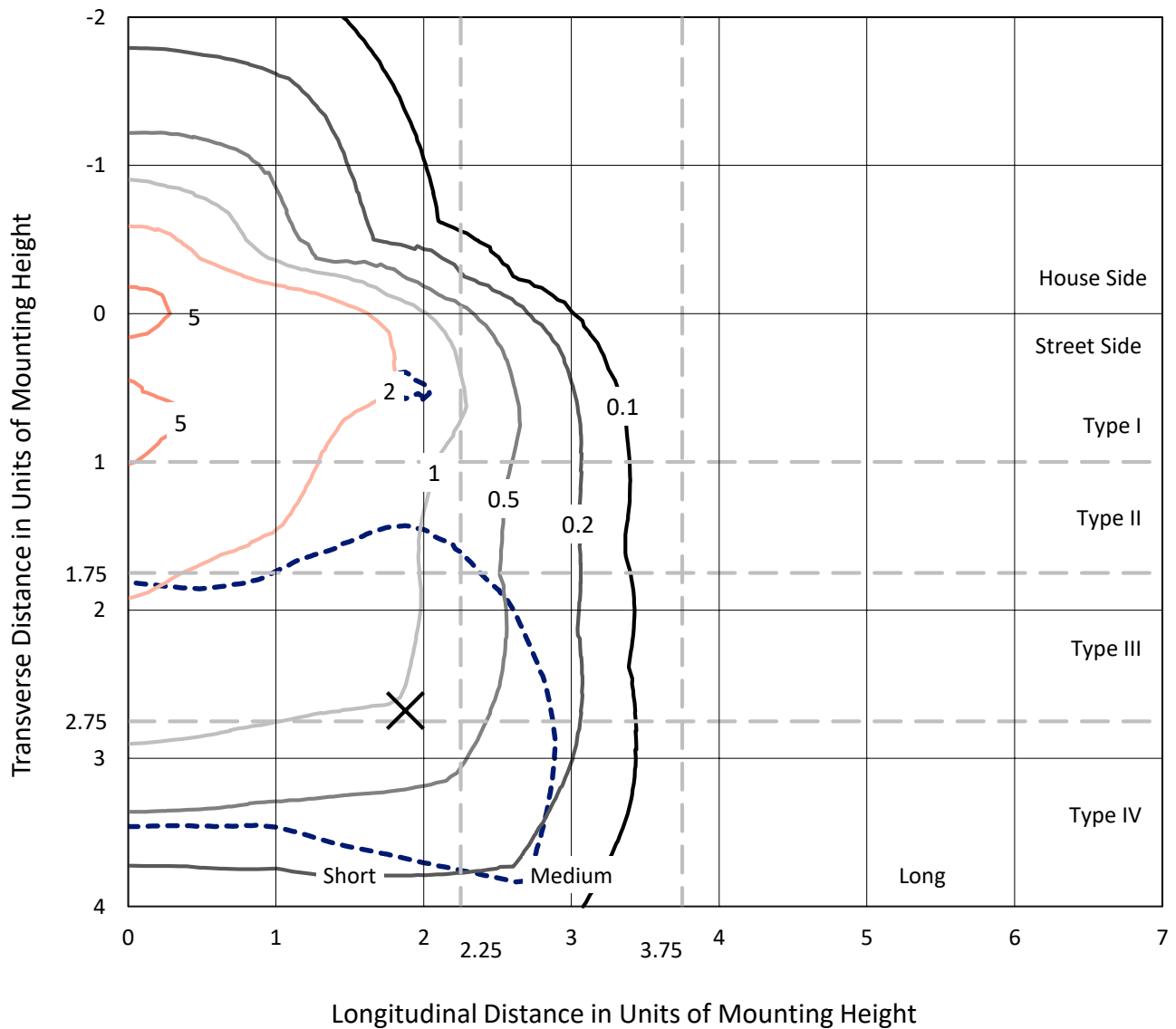
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

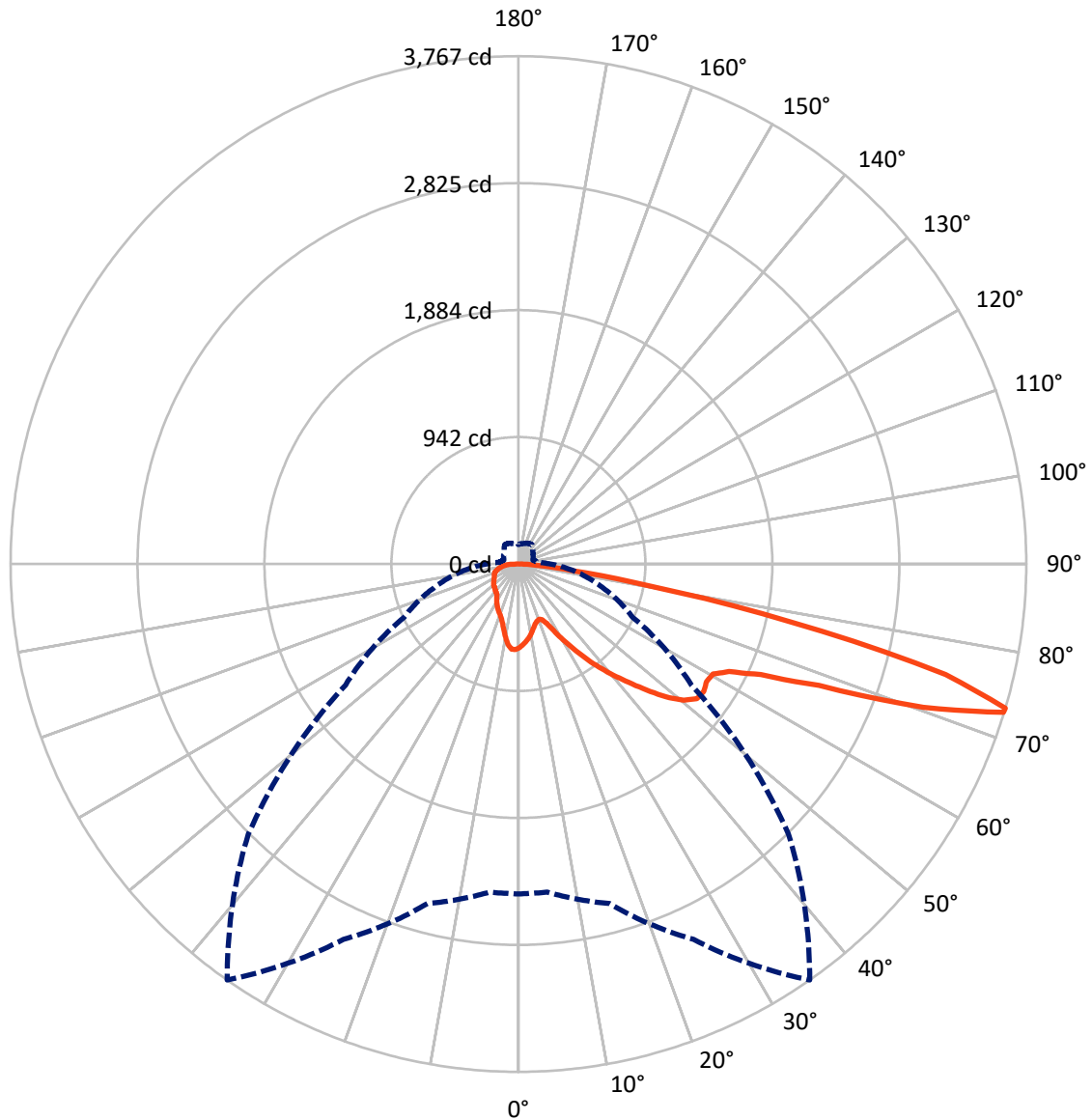
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.2 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	785.1	0.0	785.1
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	3331.3	0.0	3331.3
	% Fixture	80.9	0.0	80.9
Total	Lumens	4116.4	0.0	4116.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.2	1.4
10°-20°	140.4	3.4
20°-30°	226.9	5.5
30°-40°	380.5	9.2
40°-50°	586.6	14.3
50°-60°	787.0	19.1
60°-70°	1048.4	25.5
70°-80°	799.6	19.4
80°-90°	90.6	2.2
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°	4116.4	100.0
0°-180°	4116.4	100.0



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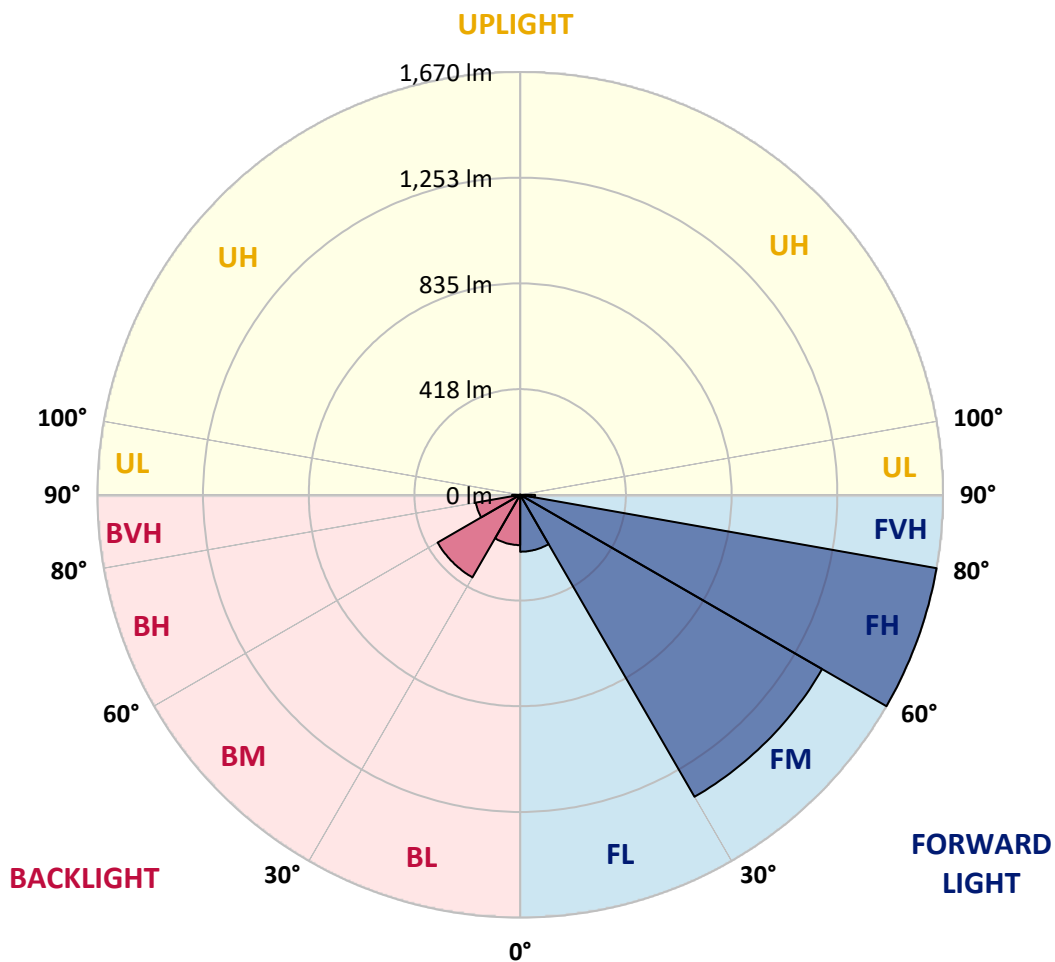
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	224.9	5.5			
FM	(30°-60°)	1377.4	33.5			
FH	(60°-80°)	1670.4	40.6			G1/1800
FVH	(80°-90°)	58.6	1.4			G1/100
BL	(0°-30°)	198.7	4.8	B1/500		
BM	(30°-60°)	376.8	9.2	B1/1000		
BH	(60°-80°)	177.6	4.3	B1/500		G1/500
BVH	(80°-90°)	32.0	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	621.3	621.3	621.3	621.3	621.3	621.3	621.3	621.3	621.3	621.3	621.3
2.5°	596.8	598.0	596.6	598.4	601.3	604.5	606.7	609.8	613.4	618.3	619.5
5°	568.7	570.5	570.5	573.6	579.4	584.5	589.3	594.4	601.9	610.4	613.8
7.5°	537.9	538.9	540.6	545.4	553.7	561.0	567.7	576.0	586.3	597.6	603.5
10°	500.7	502.1	504.9	511.6	522.8	532.9	542.6	554.1	567.1	581.2	588.7
12.5°	474.4	474.0	475.2	480.1	490.0	502.3	516.3	531.0	547.0	563.4	572.5
15°	465.5	463.3	458.8	457.6	463.0	475.2	491.4	509.4	528.6	548.3	559.6
17.5°	471.1	467.3	454.8	445.8	445.0	454.3	471.5	491.6	513.8	537.9	551.9
20°	505.8	497.0	466.3	445.2	437.8	442.4	457.4	478.8	504.9	536.9	554.9
22.5°	589.1	576.0	511.0	471.6	446.9	441.4	452.7	475.4	505.8	549.1	572.1
25°	710.2	691.7	587.7	537.7	486.7	457.2	459.8	483.1	519.9	577.6	605.3
27.5°	805.9	793.9	687.9	630.8	559.0	499.9	482.9	502.5	548.5	624.3	652.5
30°	862.8	855.5	795.0	736.3	651.3	567.9	527.2	538.9	593.4	688.9	712.2
32.5°	928.9	924.5	894.9	840.9	751.0	657.3	597.4	593.2	653.5	766.6	777.3
35°	997.3	995.9	978.5	939.7	857.9	775.1	690.5	662.4	718.9	847.2	840.5
37.5°	1060.9	1058.5	1048.5	1025.9	969.8	901.6	785.4	733.4	789.5	924.3	894.5
40°	1178.1	1159.6	1125.0	1108.0	1082.9	1008.1	860.7	799.6	862.6	997.9	941.1
42.5°	1321.0	1290.8	1226.4	1203.0	1199.5	1092.1	912.1	863.8	936.4	1070.8	987.0
45°	1433.5	1405.1	1349.5	1320.1	1333.1	1168.2	963.7	932.4	1012.3	1147.3	1034.2
47.5°	1553.5	1508.8	1435.3	1444.2	1472.7	1240.2	1016.2	1006.2	1095.5	1232.9	1092.9
50°	1557.9	1523.7	1491.4	1544.6	1588.9	1306.4	1082.1	1083.4	1197.3	1340.6	1171.0
52.5°	1467.5	1460.2	1511.4	1595.0	1658.9	1358.8	1157.0	1163.3	1327.6	1464.4	1256.8
55°	1435.9	1427.6	1486.7	1577.4	1668.4	1402.1	1238.2	1249.7	1485.1	1594.8	1340.4
57.5°	1513.0	1494.6	1498.6	1569.1	1645.2	1449.5	1326.8	1349.9	1656.3	1708.9	1394.2
60°	1728.5	1689.1	1614.4	1612.6	1657.7	1520.7	1429.2	1457.4	1834.2	1763.4	1373.2
62.5°	2030.7	1991.4	1851.4	1760.3	1753.6	1638.1	1554.9	1562.4	1937.0	1689.5	1245.3
65°	2357.8	2322.7	2166.3	2037.6	1975.5	1832.6	1701.0	1609.3	1903.4	1486.1	1021.6
67.5°	2755.0	2717.2	2582.8	2464.0	2404.3	2146.5	1803.6	1564.4	1690.1	1151.2	734.4
70°	3032.7	2994.2	2941.2	3037.4	3183.5	2599.4	1816.8	1381.9	1262.3	765.2	442.0
72.5°	2670.4	2652.4	2749.0	3154.5	3762.9	2874.2	1642.3	1006.2	733.2	406.2	255.8
73°	2446.6	2442.6	2607.5	3072.4	3767.1	2831.9	1565.8	935.2	628.8	359.4	233.8
75°	1104.8	1136.6	1498.0	2346.8	3272.9	2333.5	1102.0	536.5	355.2	248.3	176.5
77.5°	265.5	276.5	468.7	1114.5	2066.9	1390.6	499.3	265.3	227.1	175.3	128.9
80°	113.1	116.8	180.5	411.8	973.1	560.0	230.1	177.7	157.2	122.4	90.3
82.5°	62.9	66.8	102.4	186.8	392.8	191.0	140.3	123.7	103.4	73.7	58.7
85°	35.6	37.8	59.9	104.4	166.4	76.7	84.0	82.2	58.3	38.0	28.9
87.5°	16.8	18.2	28.9	48.4	65.2	30.0	42.7	47.0	36.6	23.1	15.0
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°	621.3	621.3	621.3	621.3	621.3	621.3	621.3	621.3	621.3	621.3
2.5°	620.9	624.4	628.6	630.8	632.8	635.1	637.5	637.5	637.9	638.1
5°	616.5	623.9	630.4	633.1	633.7	633.7	633.1	630.0	627.2	628.4
7.5°	607.4	618.1	623.7	622.7	615.2	606.5	599.1	590.3	585.7	584.9
10°	594.4	606.7	607.6	597.8	579.2	560.6	545.2	530.2	523.0	521.3
12.5°	580.0	591.2	584.9	564.6	534.7	507.6	488.1	472.8	466.1	464.3
15°	568.3	576.0	560.0	528.0	490.4	461.8	445.6	434.3	429.5	428.2
17.5°	562.2	563.8	534.5	491.2	451.3	427.4	417.3	412.0	410.2	409.2
20°	565.1	554.1	510.2	457.0	419.3	402.5	400.1	398.7	398.3	397.7
22.5°	580.0	551.1	487.9	424.6	391.2	383.9	385.9	385.7	385.3	384.9
25°	606.5	553.7	466.1	393.8	367.7	366.1	369.6	369.6	368.1	368.1
27.5°	641.4	559.0	441.8	364.5	346.3	346.5	349.3	348.5	346.7	345.5
30°	684.1	562.4	413.3	338.2	326.4	325.6	326.4	323.0	317.7	317.3
32.5°	727.8	558.2	380.3	314.9	305.2	303.4	302.8	298.1	292.0	290.2
35°	767.4	543.0	346.7	296.3	285.0	281.1	283.9	282.3	276.7	275.4
37.5°	796.2	514.7	316.5	279.9	270.6	269.6	271.4	272.0	265.5	264.1
40°	815.6	476.4	290.6	266.1	267.8	264.1	258.2	254.0	252.0	251.4
42.5°	831.2	436.5	268.8	259.5	268.4	257.6	244.7	238.0	241.6	243.1
45°	849.2	397.5	250.6	251.4	265.5	250.1	235.4	228.9	230.3	230.7
47.5°	873.9	350.1	231.1	238.4	255.6	244.9	229.7	220.4	213.9	210.9
50°	908.1	293.9	210.7	223.8	245.9	241.2	220.8	210.9	198.9	196.1
52.5°	931.8	241.6	193.9	211.5	237.2	233.6	213.7	200.8	188.2	185.8
55°	919.0	200.6	179.3	197.9	225.7	224.4	207.8	190.6	180.7	178.7
57.5°	854.7	174.7	168.0	185.0	211.7	216.5	199.8	181.9	174.7	173.4
60°	732.2	158.5	160.9	176.3	200.2	208.5	191.9	177.1	172.4	171.4
62.5°	568.1	147.7	155.6	170.0	191.3	203.0	187.6	176.5	174.7	173.6
65°	407.0	139.0	149.8	163.7	183.2	197.9	186.0	175.7	176.1	175.1
67.5°	276.5	131.3	142.9	156.6	175.3	193.3	183.8	173.0	177.9	176.7
70°	193.5	123.7	134.8	147.5	165.5	187.0	179.9	168.8	168.4	163.7
72.5°	151.0	113.9	123.7	134.8	152.8	178.1	172.0	159.5	153.0	148.1
73°	144.1	111.5	121.0	132.0	150.0	175.9	169.8	157.0	149.6	145.1
75°	119.2	101.2	109.9	119.8	138.2	165.7	159.1	145.3	136.0	133.2
77.5°	93.7	86.6	94.9	103.8	121.8	150.6	143.3	130.1	124.9	122.6
80°	69.4	71.8	79.1	87.0	105.6	134.6	128.1	114.8	137.8	132.0
82.5°	48.8	54.4	61.1	68.2	88.6	119.0	111.1	97.5	100.8	83.8
85°	28.9	35.6	41.9	48.0	63.8	98.6	91.7	77.7	63.7	60.7
87.5°	16.8	19.8	21.5	27.9	43.9	74.3	64.6	57.5	33.0	22.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)