

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: P302885

Luminaire Tested: **GLNA-AF-01-LED-E1-T4W-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P302885
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P191569)
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-T4W-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4063.1 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

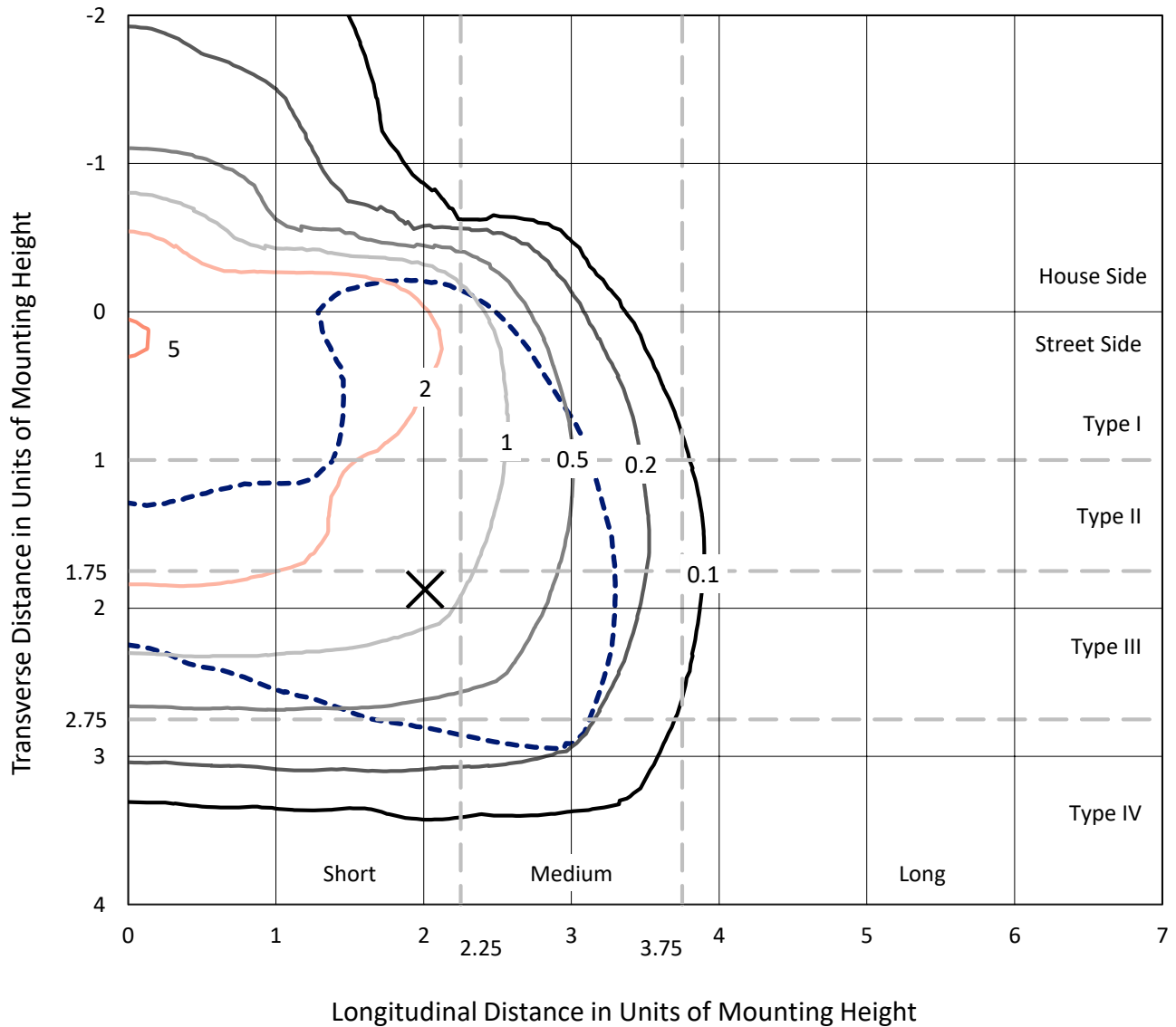
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

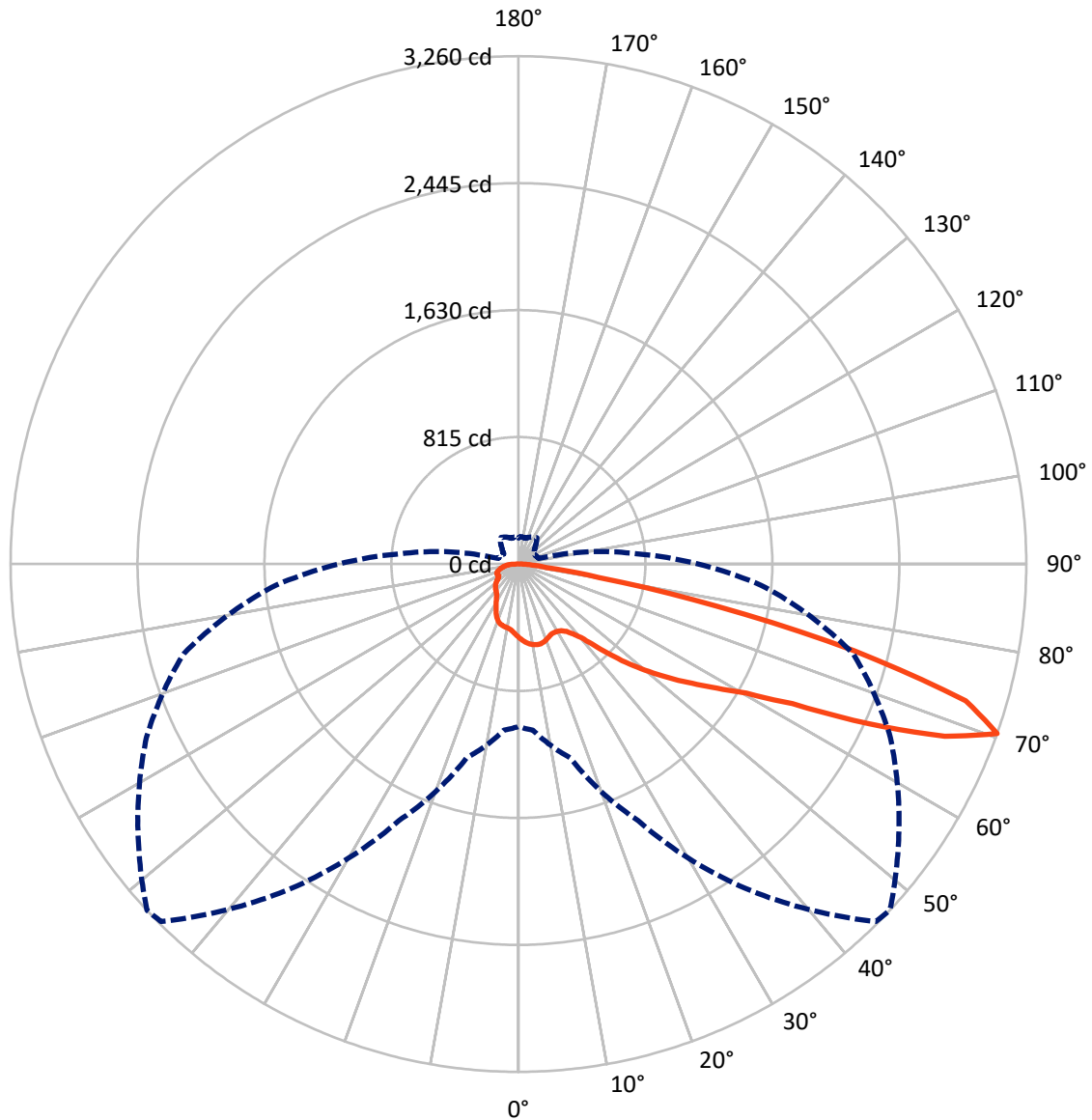
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	847.6	0.0	847.6
	% Fixture	20.9	0.0	20.9
Street Side	Lumens	3215.5	0.0	3215.5
	% Fixture	79.1	0.0	79.1
Total	Lumens	4063.1	0.0	4063.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.2	1.1
10°-20°	132.5	3.3
20°-30°	195.7	4.8
30°-40°	284.5	7.0
40°-50°	511.9	12.6
50°-60°	886.8	21.8
60°-70°	1265.8	31.2
70°-80°	649.8	16.0
80°-90°	91.0	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°	4063.1	100.0
0°-180°	4063.1	100.0

Coefficient of Utilization



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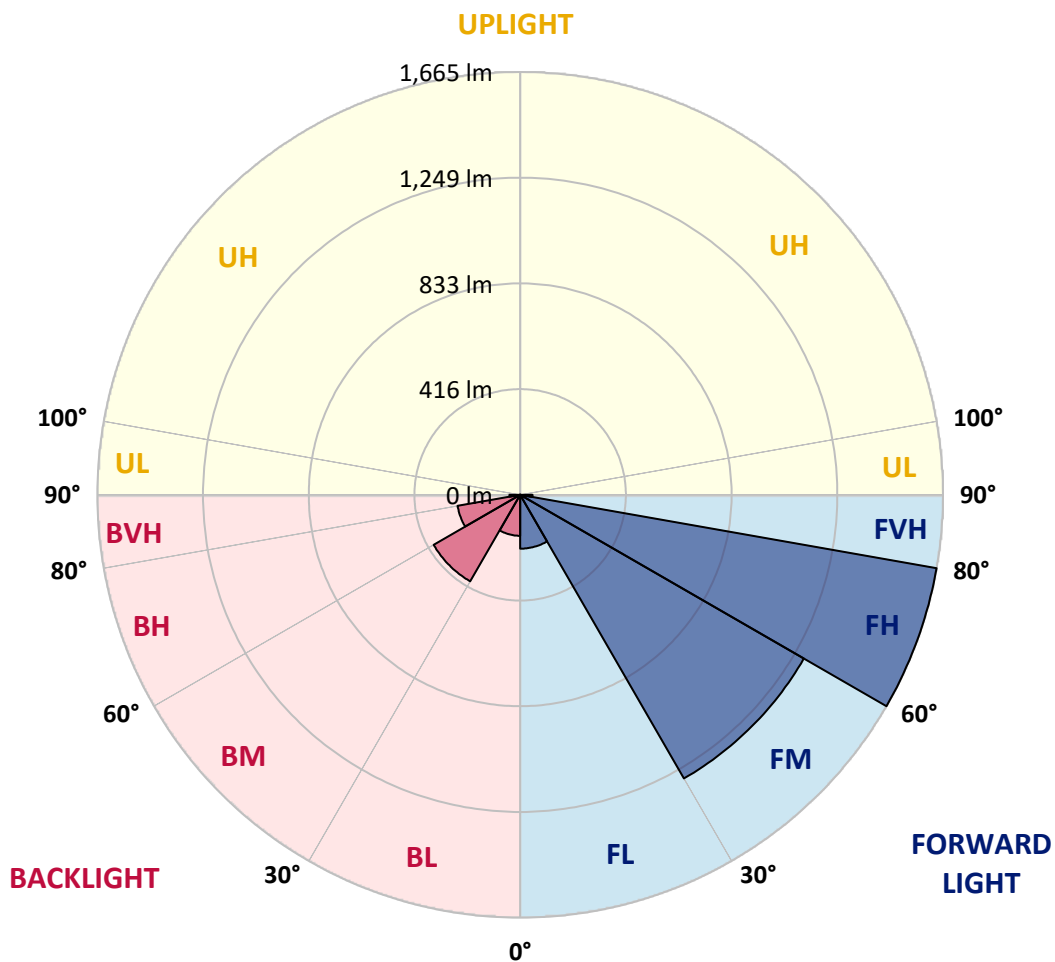
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	212.0	5.2			
FM	(30°-60°)	1289.7	31.7			
FH	(60°-80°)	1665.2	41.0			G1/1800
FVH	(80°-90°)	48.5	1.2			G1/100
BL	(0°-30°)	161.4	4.0	B1/500		
BM	(30°-60°)	393.5	9.7	B1/1000		
BH	(60°-80°)	250.4	6.2	B1/500		G1/500
BVH	(80°-90°)	42.4	1.0			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°	47°	55°	65°	75°	85°
0°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	499.1	498.2	497.8	497.0	496.0	491.0	490.0	486.5	481.5	476.4	471.0
5°	532.0	531.8	529.5	525.6	519.3	508.4	505.8	497.2	485.5	474.2	463.0
7.5°	560.8	559.0	554.9	546.9	535.9	521.1	517.5	505.4	489.4	474.0	458.8
10°	581.9	580.9	571.9	561.0	546.5	530.1	526.0	512.5	494.9	475.4	456.4
12.5°	594.0	592.0	581.5	568.5	551.3	535.3	531.1	517.5	497.8	475.4	453.1
15°	593.2	591.8	581.3	567.1	549.8	535.7	532.0	518.3	497.2	473.4	448.7
17.5°	577.4	578.0	569.1	555.1	540.8	530.1	526.8	514.2	493.2	469.5	443.6
20°	549.8	552.5	546.5	534.1	526.2	518.9	516.7	506.0	487.1	463.8	438.0
22.5°	522.1	524.6	522.3	511.7	510.6	506.2	505.1	497.4	481.7	460.2	434.7
25°	501.7	504.1	503.7	494.5	498.2	498.0	497.0	493.2	480.6	460.2	435.3
27.5°	496.2	497.0	496.2	487.9	492.8	496.8	496.0	495.3	484.1	465.9	442.8
30°	515.2	514.0	507.8	491.0	495.6	501.1	500.3	500.7	494.7	481.0	459.6
32.5°	590.9	585.5	566.1	518.9	506.8	509.8	510.2	516.7	517.7	504.1	485.7
35°	704.1	698.2	673.1	593.6	541.8	531.6	531.6	541.4	547.3	537.3	526.2
37.5°	824.1	817.5	804.2	697.2	615.3	569.3	568.3	575.2	583.7	586.1	588.9
40°	960.5	953.6	957.3	813.4	718.0	634.7	620.7	615.7	638.7	653.9	676.1
42.5°	1109.8	1106.5	1107.9	942.9	834.7	732.6	712.6	687.1	714.8	741.9	788.3
45°	1247.9	1250.6	1249.3	1081.5	964.9	851.9	830.8	781.4	808.5	854.9	930.7
47.5°	1368.9	1357.4	1375.2	1232.9	1110.5	985.6	959.5	893.3	920.8	978.1	1106.1
50°	1515.7	1514.2	1488.1	1434.9	1286.6	1119.8	1085.6	1008.9	1051.6	1131.3	1327.4
52.5°	1670.2	1641.5	1617.6	1592.0	1473.5	1257.4	1215.5	1124.1	1205.4	1305.6	1597.0
55°	1701.7	1688.9	1718.5	1761.5	1653.5	1400.3	1351.5	1268.6	1378.6	1504.9	1907.9
57.5°	1769.4	1769.2	1830.5	1907.0	1838.9	1551.9	1502.7	1443.2	1573.3	1733.2	2238.0
60°	1815.0	1827.8	1941.8	2090.2	2021.0	1727.1	1681.8	1644.6	1794.7	1988.4	2545.6
62.5°	1838.9	1856.3	2011.7	2164.5	2278.3	2018.6	1973.4	1919.8	2087.6	2268.3	2725.5
65°	1739.5	1773.7	2000.8	2228.8	2503.7	2491.2	2470.9	2376.8	2453.9	2489.5	2660.5
67.5°	1464.3	1499.3	1763.8	2168.8	2664.6	2947.1	2951.5	2790.7	2679.3	2508.4	2236.9
70°	1043.3	1070.8	1289.6	1818.4	2542.1	3245.0	3259.8	2981.5	2634.4	2224.6	1562.8
72.5°	495.3	512.1	719.3	1183.5	2017.3	2973.2	3001.9	2738.0	2240.0	1647.0	852.5
75°	182.0	187.2	243.1	503.5	1170.0	2192.6	2226.4	1962.7	1484.9	820.0	324.8
77.5°	109.1	112.5	136.4	212.5	460.2	1253.3	1303.2	1067.4	649.0	305.2	159.7
80°	76.3	78.6	97.8	132.2	217.4	477.6	522.1	435.7	258.5	193.1	116.2
82.5°	51.6	52.8	68.8	89.4	144.5	170.6	184.0	193.7	174.4	143.7	73.7
85°	33.8	35.0	46.7	58.9	91.9	88.2	90.1	114.0	127.3	97.6	40.9
87.5°	19.4	20.2	28.1	31.4	45.1	37.4	37.7	60.1	81.5	65.8	24.9
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°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	469.7	467.1	461.4	457.8	454.4	453.6	452.3	452.1	451.9	451.9	451.3
5°	459.2	454.8	446.0	441.0	436.8	436.4	436.2	437.2	437.6	438.0	437.4
7.5°	452.5	446.6	435.5	428.4	423.4	422.2	424.2	428.8	431.7	432.9	432.3
10°	448.3	441.0	428.2	420.4	416.3	415.7	418.3	423.6	429.7	432.1	431.9
12.5°	443.6	435.3	421.6	413.5	411.2	412.4	415.7	420.6	427.0	430.7	430.9
15°	438.8	429.2	415.1	408.0	407.0	408.6	411.8	415.5	420.4	424.2	424.6
17.5°	433.1	423.0	409.0	401.7	400.9	401.7	401.8	403.8	407.0	410.6	411.6
20°	427.0	416.7	402.0	394.8	391.2	388.1	384.5	384.8	385.8	389.4	390.2
22.5°	422.6	412.4	396.7	386.6	377.2	367.6	360.6	359.6	360.0	362.9	363.9
25°	423.0	412.2	395.3	378.0	357.2	342.0	332.5	330.9	330.7	332.8	334.3
27.5°	430.7	419.8	400.5	369.0	335.5	312.9	302.8	301.7	300.1	300.7	302.3
30°	447.9	437.8	412.9	360.0	311.9	284.5	274.0	272.8	270.6	269.6	270.8
32.5°	476.0	467.7	431.1	351.2	288.4	260.1	249.5	246.9	245.5	244.4	245.3
35°	522.6	519.1	455.4	341.8	267.7	241.3	231.7	227.7	225.8	227.9	229.5
37.5°	595.8	597.8	487.3	326.9	251.6	228.9	220.8	216.3	213.3	215.1	216.8
40°	699.4	700.8	522.4	306.0	237.8	221.6	212.9	208.8	204.6	201.4	201.2
42.5°	835.3	821.4	557.0	283.3	221.8	217.0	207.4	202.2	195.9	187.2	185.4
45°	996.6	947.5	583.3	257.2	203.8	211.5	201.2	194.1	184.2	174.8	173.8
47.5°	1182.5	1082.8	596.2	230.1	187.0	203.4	193.7	182.4	170.0	165.2	164.7
50°	1409.4	1243.6	602.3	203.8	172.4	192.8	182.8	169.6	159.1	158.2	157.6
52.5°	1667.8	1436.9	604.3	182.2	160.3	178.9	174.0	161.1	152.8	153.6	153.6
55°	1938.2	1636.5	577.4	166.6	149.2	164.7	168.0	157.8	150.8	154.0	155.2
57.5°	2186.4	1813.5	492.8	154.6	138.8	153.8	165.8	160.9	156.2	169.0	169.8
60°	2377.0	1918.0	368.0	143.7	131.0	150.0	171.6	173.0	174.2	204.8	209.0
62.5°	2416.9	1883.3	253.0	135.2	127.5	153.2	182.0	182.2	180.9	202.2	204.8
65°	2233.7	1663.2	184.0	130.4	124.5	158.9	191.0	186.8	177.7	193.9	189.1
67.5°	1773.9	1253.1	153.2	126.9	120.2	158.5	200.4	191.0	175.9	190.0	182.2
70°	1151.4	757.7	136.4	123.9	115.0	151.0	205.9	190.6	170.8	176.7	167.6
72.5°	561.8	338.8	125.1	119.6	109.7	140.6	205.7	187.0	165.4	165.0	160.1
75°	219.8	155.2	114.8	113.1	100.6	128.7	200.2	181.9	159.1	152.8	151.0
77.5°	128.7	110.7	101.8	103.4	89.7	116.8	192.2	173.0	150.4	142.9	141.0
80°	93.7	82.9	86.8	89.4	76.7	105.0	181.3	162.1	140.8	144.5	141.7
82.5°	60.1	53.4	70.4	72.9	63.9	92.9	169.4	150.6	127.1	115.4	112.7
85°	30.7	33.8	52.4	55.5	49.2	76.3	155.0	135.4	111.7	96.0	97.6
87.5°	17.2	23.1	33.4	37.4	34.8	58.7	125.7	111.7	91.1	74.1	65.3
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)