

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: P450223

Luminaire Tested: **GALN-SA1A-730-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P450223  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA1A-730-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4255 lumens  
Efficiency: N/A  
Efficacy: 128.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

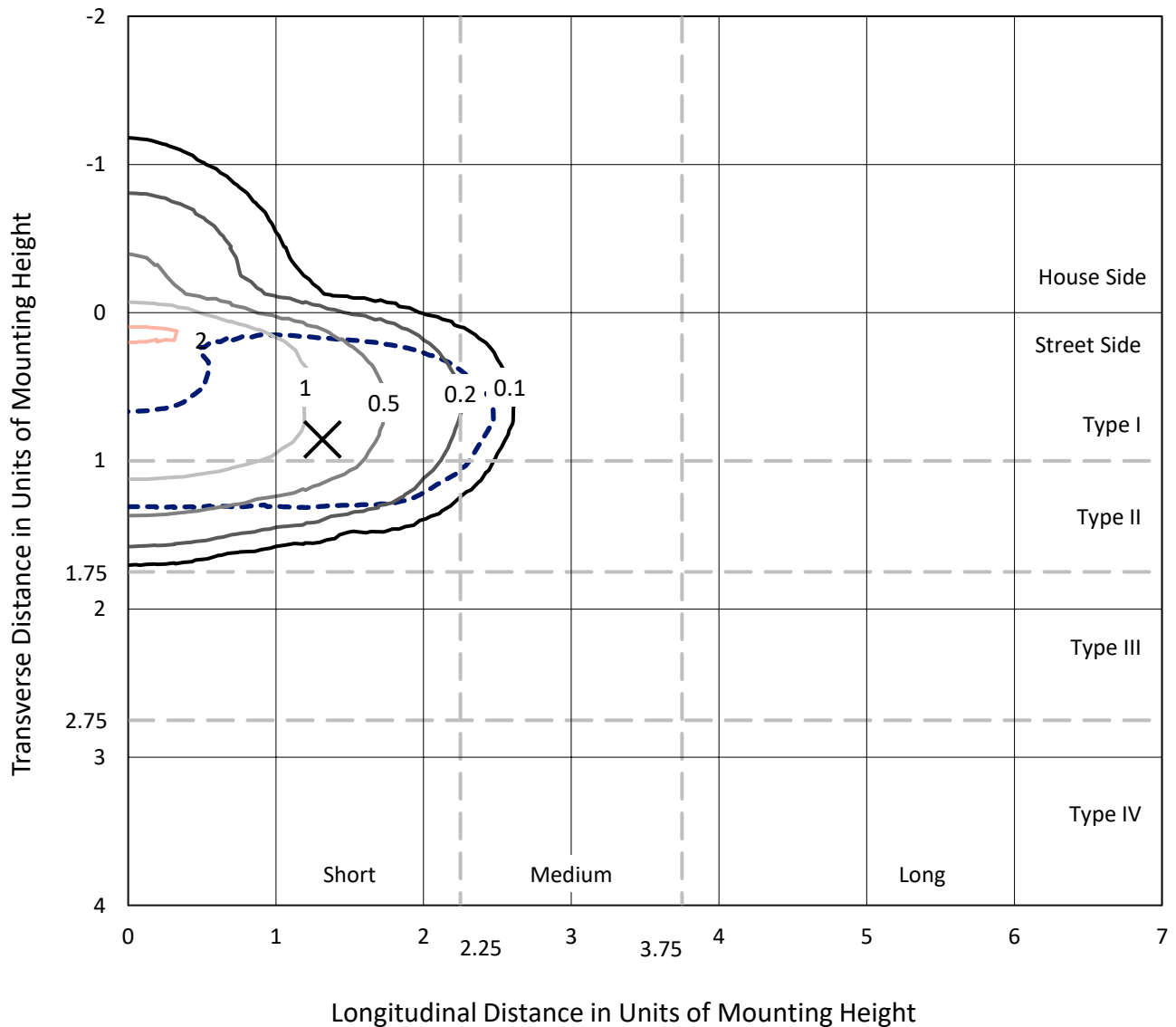
Input Watts (W): 33  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

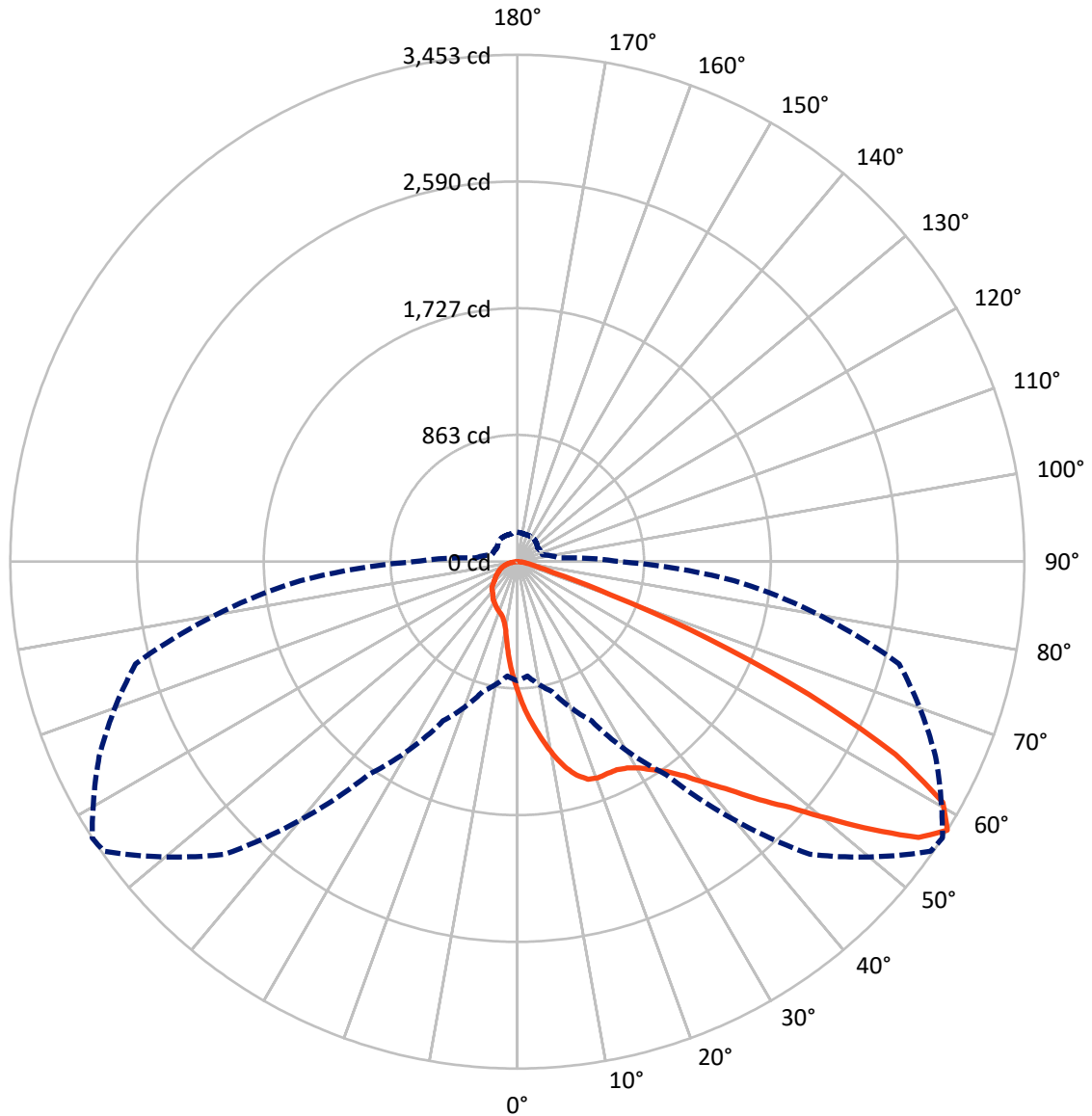
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	647.1	0.0	647.1
	% Fixture	15.2	0.0	15.2
<b>Street Side</b>	Lumens	3607.9	0.0	3607.9
	% Fixture	84.8	0.0	84.8
<b>Total</b>	Lumens	4255.0	0.0	4255.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.9	2.0
10°-20°	253.2	6.0
20°-30°	420.4	9.9
30°-40°	633.3	14.9
40°-50°	950.8	22.3
50°-60°	1065.8	25.0
60°-70°	623.7	14.7
70°-80°	184.5	4.3
80°-90°	37.3	0.9
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°	4255.0	100.0
0°-180°	4255.0	100.0

**Coefficient of Utilization**



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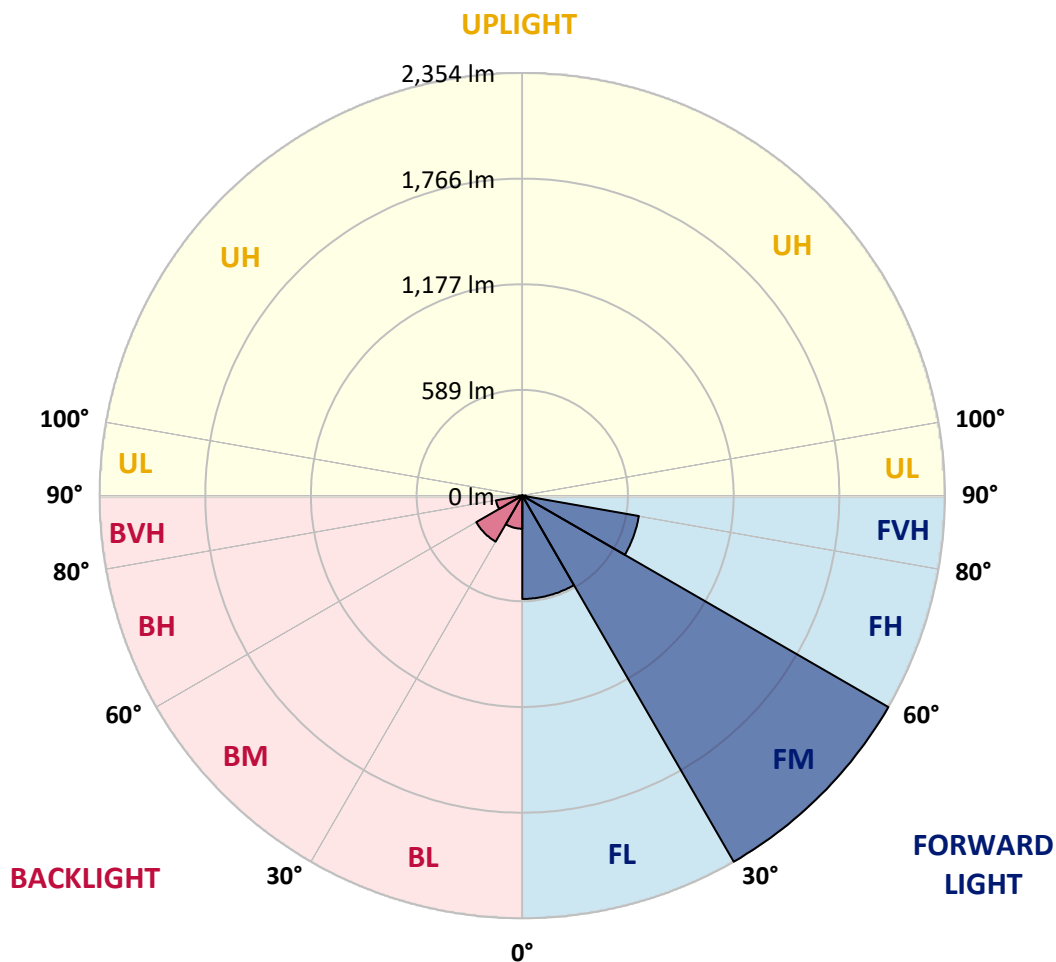
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	575.2	13.5			
FM	(30°-60°)	2354.0	55.3			
FH	(60°-80°)	659.4	15.5			G0/660
FVH	(80°-90°)	19.4	0.5			G1/100
BL	(0°-30°)	184.4	4.3	B1/500		
BM	(30°-60°)	295.9	7.0	B1/1000		
BH	(60°-80°)	148.9	3.5	B1/500		G1/500
BVH	(80°-90°)	17.9	0.4			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	893.9	893.9	893.9	893.9	893.9	893.9	893.9	893.9	893.9	893.9	893.9
2.5°	1110.8	1098.7	1089.1	1080.7	1069.8	1040.2	1010.6	1010.2	986.6	950.3	913.0
5°	1291.7	1275.4	1277.5	1251.5	1225.4	1182.5	1119.9	1116.6	1066.5	998.5	929.3
7.5°	1409.6	1409.8	1403.3	1388.4	1360.2	1311.5	1240.5	1224.4	1154.8	1051.6	948.0
10°	1403.5	1409.8	1420.8	1433.6	1442.2	1418.2	1353.5	1333.9	1243.3	1115.9	968.7
12.5°	1323.0	1332.7	1348.3	1380.5	1432.4	1472.0	1449.9	1434.1	1345.8	1179.9	991.5
15°	1272.6	1278.5	1287.1	1308.7	1364.6	1459.4	1516.7	1508.4	1442.4	1252.4	1017.1
17.5°	1257.3	1263.1	1265.9	1279.2	1319.0	1416.1	1543.1	1558.0	1528.2	1319.0	1043.0
20°	1272.6	1275.4	1275.4	1283.4	1314.6	1390.7	1541.9	1571.9	1598.5	1398.9	1067.2
22.5°	1312.9	1314.1	1312.5	1315.3	1338.6	1397.7	1530.9	1568.2	1655.3	1466.7	1086.1
25°	1378.4	1380.3	1369.5	1363.0	1380.0	1428.5	1537.0	1571.2	1699.8	1531.4	1098.7
27.5°	1452.7	1455.0	1442.0	1426.8	1434.8	1466.4	1560.8	1591.5	1733.1	1595.2	1106.6
30°	1543.8	1544.7	1522.8	1504.6	1499.5	1523.0	1601.3	1629.9	1774.6	1670.5	1118.5
32.5°	1636.9	1643.9	1615.7	1590.1	1581.5	1588.7	1661.1	1688.9	1824.0	1751.3	1137.6
35°	1763.6	1764.8	1731.0	1699.8	1671.4	1680.7	1737.8	1757.8	1892.2	1844.7	1164.6
37.5°	1921.8	1932.5	1885.9	1827.7	1792.7	1779.2	1830.5	1852.4	1987.9	1959.3	1205.3
40°	2097.4	2101.4	2061.5	2025.2	1961.4	1922.2	1957.6	1981.4	2106.0	2096.0	1252.6
42.5°	2207.8	2216.4	2219.4	2215.7	2167.7	2102.1	2115.6	2126.7	2245.8	2224.3	1301.1
45°	2245.1	2257.9	2301.2	2393.0	2398.1	2333.3	2301.9	2312.6	2398.1	2353.8	1347.4
47.5°	2183.3	2205.2	2285.1	2473.3	2614.2	2619.1	2524.3	2500.8	2536.9	2461.2	1381.0
50°	2023.8	2028.5	2150.7	2423.2	2715.6	2892.3	2794.3	2750.5	2668.7	2540.6	1404.0
52.5°	1776.9	1782.3	1884.7	2190.6	2653.1	3083.3	3110.1	3031.9	2802.7	2602.4	1419.1
55°	1319.0	1350.0	1462.7	1758.3	2357.3	3065.4	3361.2	3316.7	2964.5	2651.3	1442.9
57.5°	811.0	782.6	916.3	1196.3	1772.9	2819.0	3438.8	3453.2	3142.7	2692.3	1482.7
60°	373.1	378.7	433.9	617.0	1080.7	2205.2	3238.9	3330.2	3241.2	2690.9	1492.8
62.5°	257.1	252.0	238.0	270.9	492.8	1394.7	2735.8	2890.5	3043.7	2607.2	1452.9
65°	229.9	224.8	197.7	188.7	226.4	607.9	1988.9	2184.0	2562.8	2396.2	1353.7
67.5°	214.7	207.8	179.8	162.1	161.6	242.0	1172.7	1407.7	1900.8	2025.9	1173.0
70°	198.9	193.3	165.6	146.0	137.7	152.1	515.4	674.8	1234.2	1459.9	913.7
72.5°	183.1	176.5	151.6	130.7	119.7	113.9	197.5	256.9	697.3	875.3	560.2
75°	160.0	156.8	135.6	118.3	106.4	92.0	125.3	143.0	333.5	402.0	281.1
77.5°	140.0	136.5	120.4	103.4	94.8	74.8	89.0	97.1	140.7	163.0	126.9
80°	102.5	106.0	101.6	91.3	84.5	58.7	59.9	66.6	83.6	92.5	77.6
82.5°	65.0	71.5	78.3	70.3	64.1	46.4	41.5	44.0	57.1	60.6	34.5
85°	27.3	27.7	45.4	42.9	36.6	27.5	24.9	26.3	30.5	31.9	16.1
87.5°	10.5	10.2	16.1	14.9	11.4	7.9	7.9	8.9	12.1	11.2	5.1
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°	893.9	893.9	893.9	893.9	893.9	893.9	893.9	893.9	893.9	893.9	893.9
2.5°	897.0	880.4	847.6	806.8	777.0	743.5	713.9	692.7	684.8	681.0	674.1
5°	896.3	863.6	795.6	724.4	667.1	608.4	558.8	526.6	523.8	502.4	500.3
7.5°	896.5	846.6	738.3	633.5	546.2	486.1	445.1	434.4	421.6	418.3	419.9
10°	897.2	825.0	676.9	543.6	459.1	419.7	404.3	400.1	400.6	402.0	402.2
12.5°	898.1	804.0	613.0	475.4	410.2	393.9	392.2	396.0	399.9	402.9	403.6
15°	899.3	780.0	550.8	420.4	385.7	384.3	389.7	396.0	401.5	406.0	406.7
17.5°	897.9	752.1	498.7	386.6	372.2	379.0	387.8	395.7	400.8	405.0	405.5
20°	894.6	720.9	448.4	362.9	363.8	374.8	384.3	391.8	397.4	399.4	401.1
22.5°	882.0	683.6	404.6	344.5	353.8	368.9	380.3	384.8	378.5	374.1	375.2
25°	860.6	635.2	363.8	329.6	344.7	360.8	372.4	361.7	356.6	354.7	355.7
27.5°	833.8	582.1	333.1	314.0	333.1	351.7	348.4	346.6	344.2	341.2	341.9
30°	805.0	530.1	307.0	301.9	320.5	331.2	332.6	335.6	333.1	328.4	330.3
32.5°	778.2	481.2	287.2	291.6	311.6	310.0	320.5	324.0	312.1	296.5	297.2
35°	755.3	435.8	272.3	281.6	296.5	297.2	307.7	295.6	282.8	275.3	275.8
37.5°	738.1	400.4	262.5	273.0	277.2	286.0	280.4	274.1	272.5	267.4	267.6
40°	727.9	369.4	256.2	266.2	265.5	271.6	253.6	259.9	262.3	260.6	260.9
42.5°	717.6	347.5	249.7	256.9	256.7	244.8	240.8	246.2	252.2	252.9	252.5
45°	709.5	330.5	242.9	242.7	247.4	228.7	227.6	230.8	239.4	243.6	243.4
47.5°	700.4	316.3	232.7	226.2	227.6	218.7	216.8	218.2	228.7	235.5	237.3
50°	689.0	302.1	219.9	211.0	205.2	209.4	209.9	210.1	220.6	228.3	229.9
52.5°	679.9	291.4	205.2	198.7	191.7	201.0	204.5	205.0	211.3	217.5	218.7
55°	685.2	285.3	190.8	186.1	179.8	192.4	199.1	200.1	201.5	206.1	206.8
57.5°	701.3	286.7	179.1	173.1	168.4	182.1	193.6	194.3	193.3	198.9	199.8
60°	706.2	286.0	170.5	158.6	155.8	171.2	185.4	186.8	186.6	194.7	196.3
62.5°	685.7	277.2	161.9	146.5	144.6	160.0	174.0	179.6	180.7	192.4	194.5
65°	637.5	259.0	150.5	133.7	133.7	148.1	163.0	170.7	174.0	189.6	191.9
67.5°	573.9	237.6	138.8	122.7	122.3	136.7	151.4	159.3	164.4	185.6	187.0
70°	476.3	208.7	124.4	110.9	110.9	123.9	137.2	146.7	154.2	178.2	178.2
72.5°	326.3	173.5	106.9	97.4	97.6	109.7	123.2	133.9	142.8	163.3	163.7
75°	206.4	135.6	87.8	82.9	83.8	95.3	109.2	120.4	138.1	161.4	162.1
77.5°	109.7	95.3	69.9	68.7	69.9	80.4	96.0	111.3	138.6	140.0	137.7
80°	71.0	67.5	55.2	52.9	53.3	64.8	85.5	105.7	111.3	112.7	107.6
82.5°	38.7	42.9	39.1	36.8	36.8	50.5	72.9	84.1	79.9	66.4	63.4
85°	16.5	20.0	20.3	17.7	17.0	31.2	48.9	45.9	42.6	40.8	40.3
87.5°	4.7	6.5	6.5	4.9	3.7	8.6	9.8	2.8	0.0	0.2	0.5
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)