

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: P191992

Luminaire Tested: **GLEON-AF-04-LED-E1-SL4-7050-600-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191992  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-04-LED-E1-SL4-7050-600-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 5000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12840 lumens  
Efficiency: N/A  
Efficacy: 99.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G3

Input Watts (W): 129  
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

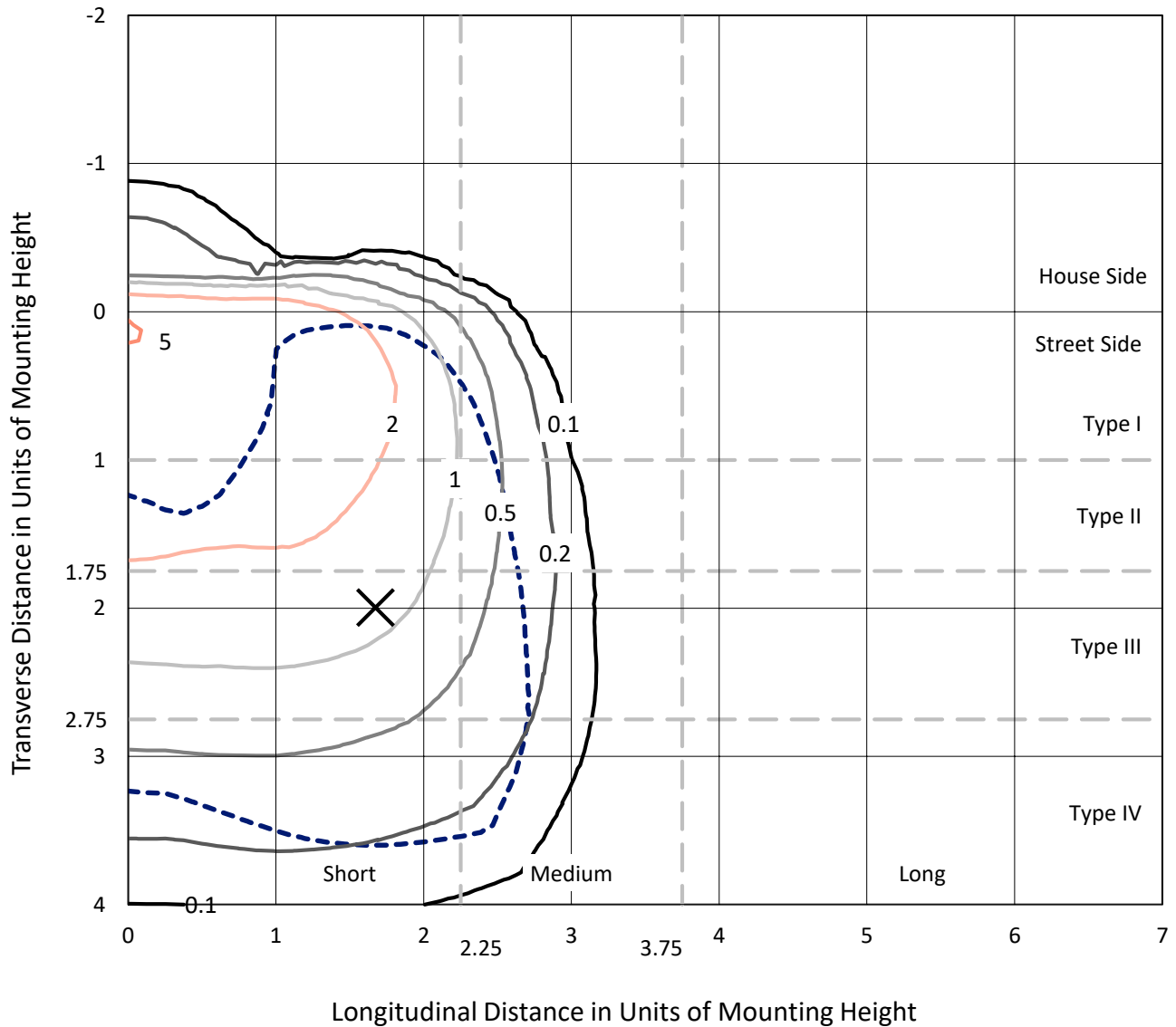


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

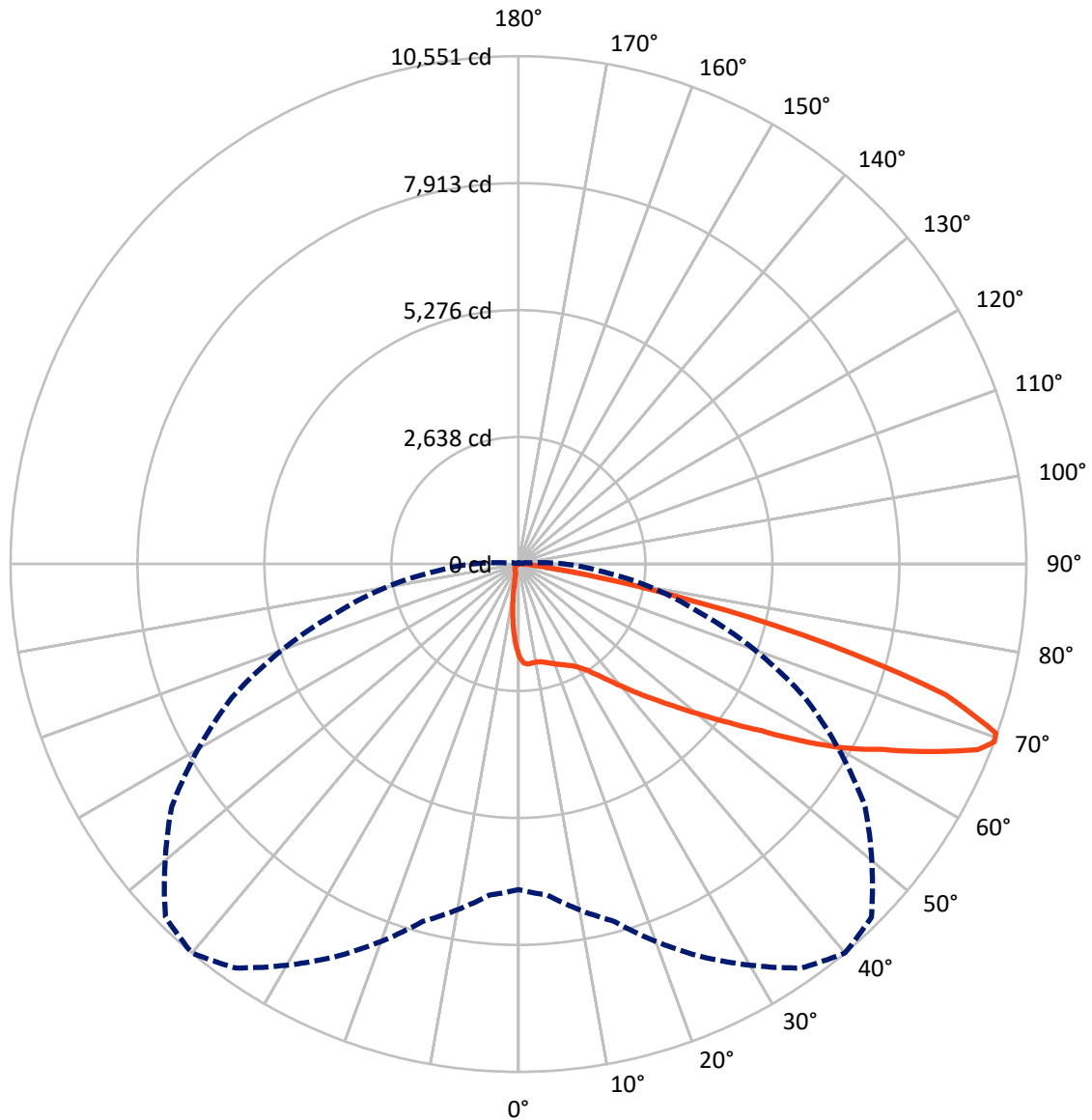


Based on 20 foot mounting height. Maximum calculated value = 5.2 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	751.2	0.0	751.2
	% Fixture	5.9	0.0	5.9
<b>Street Side</b>	Lumens	12088.8	0.0	12088.8
	% Fixture	94.1	0.0	94.1
<b>Total</b>	Lumens	12840.0	0.0	12840.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.5	1.2
10°-20°	382.5	3.0
20°-30°	644.3	5.0
30°-40°	1054.7	8.2
40°-50°	1826.2	14.2
50°-60°	2876.4	22.4
60°-70°	3756.4	29.3
70°-80°	1934.7	15.1
80°-90°	209.3	1.6
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°	12840.0	100.0
0°-180°	12840.0	100.0



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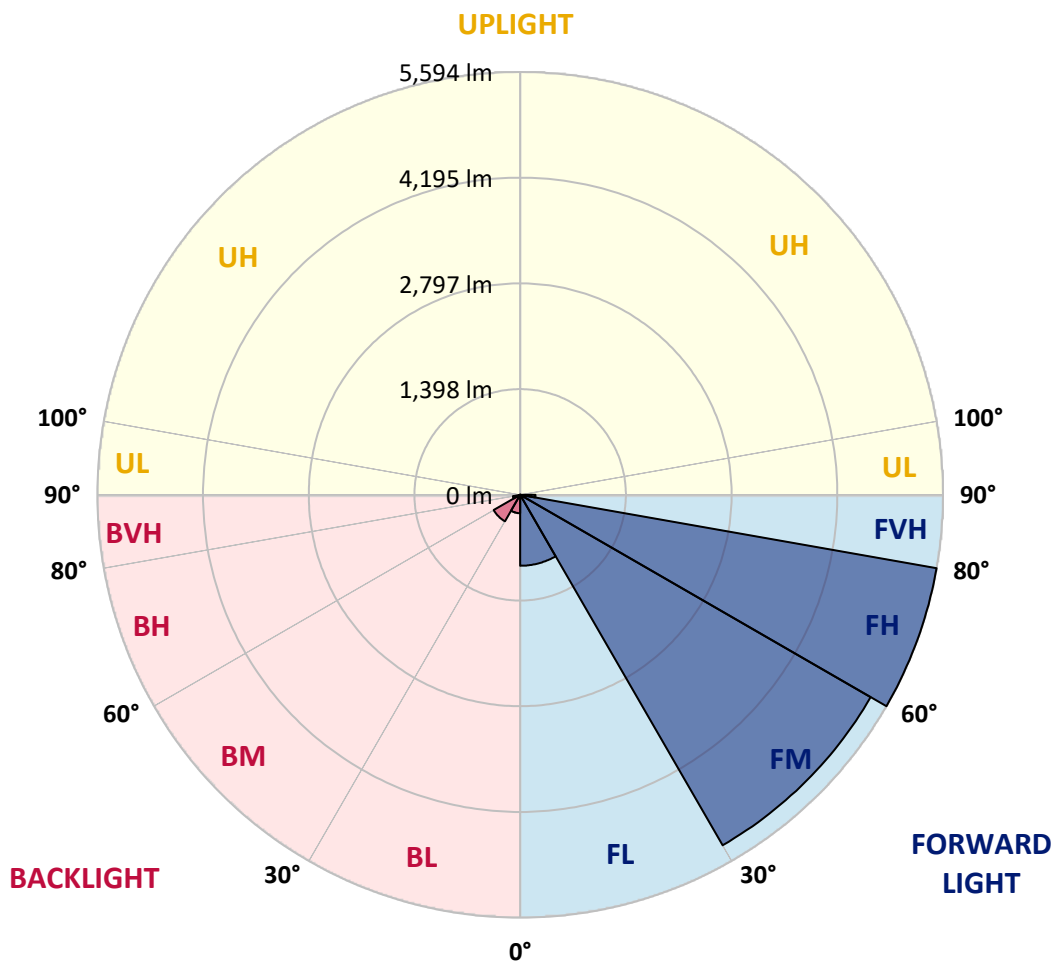
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	939.0	7.3			
FM	(30°-60°)	5353.5	41.7			
FH	(60°-80°)	5593.6	43.6			G3/7500
FVH	(80°-90°)	202.7	1.6			G2/225
BL	(0°-30°)	243.3	1.9	B1/500		
BM	(30°-60°)	403.8	3.1	B1/1000		
BH	(60°-80°)	97.5	0.8	B0/110		G0/110
BVH	(80°-90°)	6.6	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	1918.4	1918.4	1918.4	1918.4	1918.4	1918.4	1918.4	1918.4	1918.4	1918.4	1918.4
2.5°	2106.4	2094.9	2088.0	2078.9	2067.4	2057.5	2053.6	2025.4	1998.6	1961.9	1919.9
5°	2145.4	2141.5	2129.3	2117.1	2103.3	2088.0	2079.6	2046.0	2007.8	1954.3	1880.9
7.5°	2149.2	2144.6	2129.3	2112.5	2093.4	2075.0	2060.5	2026.9	1991.7	1937.5	1848.0
10°	2143.1	2137.7	2126.2	2107.9	2084.2	2066.6	2052.1	2020.0	1990.2	1941.3	1841.9
12.5°	2136.2	2130.8	2125.5	2116.3	2095.7	2083.4	2071.2	2040.6	2013.9	1972.6	1864.1
15°	2143.1	2140.0	2146.1	2142.3	2130.8	2120.1	2107.9	2080.4	2055.9	2021.5	1904.6
17.5°	2172.1	2172.1	2191.2	2193.5	2182.8	2167.5	2149.9	2122.4	2101.8	2072.7	1952.8
20°	2240.1	2237.8	2262.3	2266.9	2240.9	2217.2	2191.2	2157.6	2141.5	2123.2	2000.1
22.5°	2357.1	2346.4	2360.9	2356.3	2305.1	2268.4	2236.3	2195.0	2186.6	2178.2	2052.9
25°	2509.2	2503.0	2513.0	2467.9	2377.7	2328.0	2289.8	2243.2	2243.2	2251.6	2112.5
27.5°	2730.0	2707.1	2673.5	2594.0	2458.7	2395.3	2354.0	2304.3	2317.3	2348.7	2191.2
30°	2956.3	2931.0	2853.9	2731.6	2557.3	2490.8	2442.7	2390.7	2421.3	2478.6	2296.7
32.5°	3179.4	3151.2	3041.9	2887.5	2698.7	2632.2	2585.6	2528.3	2579.5	2675.8	2451.1
35°	3395.7	3370.5	3244.4	3062.5	2886.7	2831.7	2788.9	2739.2	2804.9	2939.5	2668.9
37.5°	3638.8	3611.3	3457.6	3260.5	3115.2	3075.5	3044.2	2994.5	3109.1	3306.3	2972.3
40°	3937.6	3891.0	3683.9	3487.4	3379.7	3360.6	3339.2	3332.3	3510.4	3783.2	3376.6
42.5°	4280.0	4203.6	3920.8	3726.7	3670.1	3683.9	3678.5	3709.1	4012.5	4376.3	3868.8
45°	4622.4	4523.8	4184.5	3981.9	3989.6	4037.7	4067.5	4189.8	4641.5	5056.5	4398.5
47.5°	4912.8	4815.8	4437.5	4257.8	4349.6	4444.3	4525.3	4756.9	5288.1	5726.0	4810.4
50°	5161.2	5069.5	4705.7	4561.3	4767.6	4920.5	5051.9	5395.1	5983.6	6235.8	5099.3
52.5°	5364.5	5303.4	4983.9	4909.0	5245.3	5469.2	5661.8	6073.0	6599.6	6650.1	5324.0
55°	5562.5	5518.9	5282.8	5322.5	5806.3	6111.2	6355.1	6792.2	7130.0	6995.5	5539.6
57.5°	5790.2	5750.5	5623.6	5846.8	6543.8	6927.5	7193.5	7429.6	7597.0	7348.6	5742.9
60°	6022.6	5999.7	6002.7	6429.2	7390.7	7759.0	7905.8	7966.9	8055.6	7681.1	5754.3
62.5°	6244.2	6287.8	6436.1	7077.3	8201.6	8484.4	8558.5	8618.9	8514.9	7733.8	5316.4
65°	6619.5	6690.6	7044.4	7944.8	9093.5	9396.2	9472.6	9265.5	8587.5	7052.1	4324.3
67.5°	6802.9	6932.9	7564.2	8753.4	9958.7	10295.0	10266.7	9307.5	7706.3	5377.5	2775.1
69°	6764.7	6903.0	7684.1	9001.0	10246.0	10551.0	10371.4	8793.1	6565.2	3895.6	1703.6
70°	6613.4	6753.2	7622.2	8991.8	10282.7	10524.2	10177.3	8158.0	5551.0	2848.5	1065.4
72.5°	5522.7	5643.5	6767.0	8127.4	9472.6	9276.2	8514.2	5651.9	2704.8	775.8	240.0
75°	3399.6	3466.8	4855.5	6122.7	7154.5	6650.1	5672.5	2811.8	806.3	219.4	133.0
77.5°	1796.1	1826.6	2658.2	3609.0	4535.3	3752.7	2907.4	1096.8	371.4	137.6	96.3
80°	1061.6	1084.5	1431.5	1650.1	1962.7	1639.4	1162.5	673.3	266.0	86.4	85.6
82.5°	607.6	622.1	1037.9	917.1	773.5	660.3	578.6	638.2	159.7	58.1	88.7
85°	223.2	226.2	583.9	697.8	460.1	273.6	287.4	528.9	42.8	36.7	69.6
87.5°	103.9	101.7	300.4	427.2	269.0	173.5	223.9	116.2	16.8	23.7	19.1
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°	1918.4	1918.4	1918.4	1918.4	1918.4	1918.4	1918.4	1918.4	1918.4	1918.4	1918.4
2.5°	1895.4	1867.2	1815.9	1763.2	1709.7	1668.4	1627.9	1595.8	1585.1	1565.3	1566.8
5°	1837.3	1785.4	1678.4	1569.8	1456.7	1363.5	1275.6	1204.5	1170.1	1135.0	1135.0
7.5°	1786.9	1711.2	1543.9	1367.3	1184.6	1031.0	892.7	788.7	731.4	685.6	684.8
10°	1767.8	1665.4	1431.5	1178.5	924.0	714.6	550.3	444.8	390.6	355.4	353.9
12.5°	1776.2	1649.3	1345.1	1004.3	684.8	459.3	318.7	250.7	227.8	217.1	217.1
15°	1800.7	1644.7	1258.8	833.8	483.8	287.4	211.7	193.4	191.8	191.8	191.8
17.5°	1830.5	1646.3	1170.1	668.0	329.4	205.6	182.7	180.4	181.9	181.9	181.9
20°	1861.0	1647.0	1074.6	514.4	232.3	178.8	172.0	171.2	172.7	172.7	173.5
22.5°	1898.5	1650.9	979.1	384.4	191.8	168.9	163.6	163.6	164.3	164.3	163.6
25°	1941.3	1658.5	879.7	285.1	175.0	162.0	157.4	156.7	157.4	156.7	155.9
27.5°	1994.8	1669.2	768.9	223.2	167.4	155.2	151.3	151.3	150.6	149.8	149.0
30°	2062.0	1681.4	644.3	189.5	159.7	149.0	145.2	144.5	143.7	142.2	142.2
32.5°	2164.5	1708.2	521.2	172.0	151.3	140.6	137.6	137.6	136.0	134.5	133.8
35°	2321.9	1760.9	411.2	161.3	142.2	131.5	127.6	127.6	126.1	125.3	124.6
37.5°	2539.7	1841.2	319.5	151.3	133.0	121.5	117.7	116.9	115.4	113.9	113.1
40°	2829.4	1940.5	251.5	142.2	123.8	111.6	108.5	107.0	103.9	101.7	101.7
42.5°	3193.2	2053.6	204.1	132.2	113.1	102.4	100.1	97.8	92.5	90.2	89.4
45°	3573.8	2155.3	172.7	120.8	102.4	93.2	91.7	87.9	81.0	78.7	78.7
47.5°	3848.2	2179.0	152.1	110.1	92.5	83.3	82.5	75.7	69.6	68.0	67.3
50°	4019.4	2132.4	135.3	99.4	83.3	74.1	71.8	63.4	59.6	58.1	57.3
52.5°	4134.8	2049.1	121.5	90.2	74.9	65.7	60.4	54.3	51.2	49.7	49.7
55°	4227.3	1931.4	107.8	81.8	68.0	58.9	51.2	46.6	43.6	42.0	42.0
57.5°	4253.3	1771.6	94.0	74.9	61.1	52.0	43.6	40.5	36.7	35.9	35.9
60°	4064.5	1483.5	83.3	66.5	55.0	45.1	38.2	34.4	30.6	29.8	29.0
62.5°	3566.9	1148.0	73.4	58.9	48.2	39.0	32.9	28.3	25.2	25.2	25.2
65°	2720.9	769.6	64.2	51.2	42.0	32.9	28.3	22.9	21.4	21.4	22.2
67.5°	1628.7	418.8	55.0	43.6	35.9	27.5	23.7	19.9	19.1	19.9	19.9
69°	954.6	246.1	49.7	39.0	31.3	24.5	20.6	17.6	19.1	19.9	19.9
70°	589.3	165.9	45.9	35.2	28.3	22.2	19.1	16.8	18.3	19.1	19.1
72.5°	164.3	85.6	36.7	27.5	22.9	18.3	15.3	15.3	17.6	18.3	18.3
75°	107.0	63.4	28.3	20.6	17.6	14.5	13.0	14.5	16.8	17.6	17.6
77.5°	88.7	52.0	22.9	16.8	14.5	13.8	12.2	13.0	15.3	16.1	16.1
80°	81.0	36.7	18.3	15.3	13.0	12.2	11.5	10.7	13.8	14.5	14.5
82.5°	77.2	29.0	16.1	13.8	12.2	10.7	9.9	10.7	12.2	13.0	13.8
85°	48.2	19.1	14.5	13.0	10.7	9.9	9.9	9.9	11.5	12.2	12.2
87.5°	17.6	15.3	13.0	10.7	9.2	9.2	9.2	9.2	9.9	11.5	11.5
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)