

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: STREETWORKS

Report Number: P321193

Luminaire Tested: **GAN-SA9A-727-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321193
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA9A-727-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28123 lumens
Efficiency: N/A
Efficacy: 97.0 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

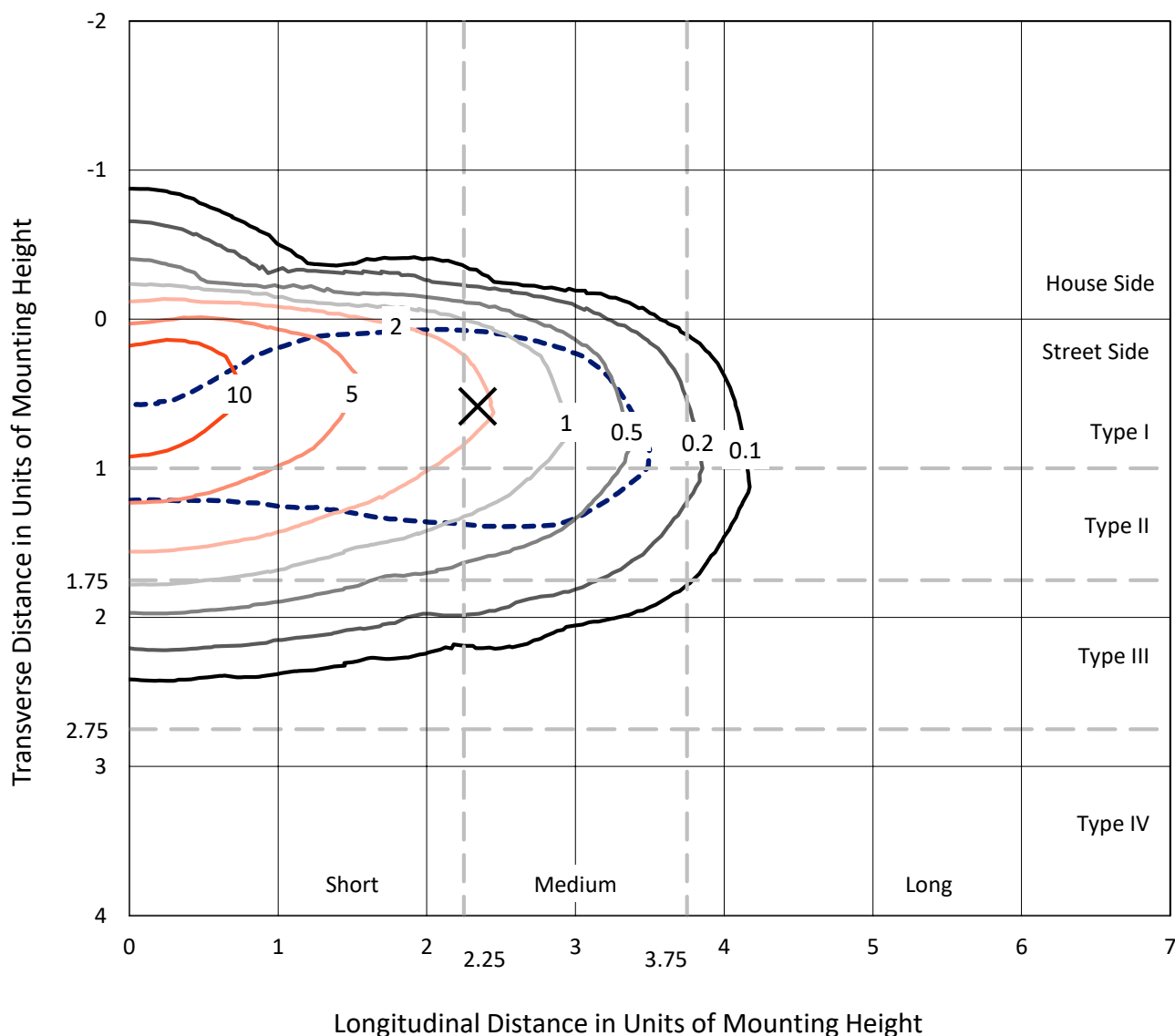
Input Watts (W): 290
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

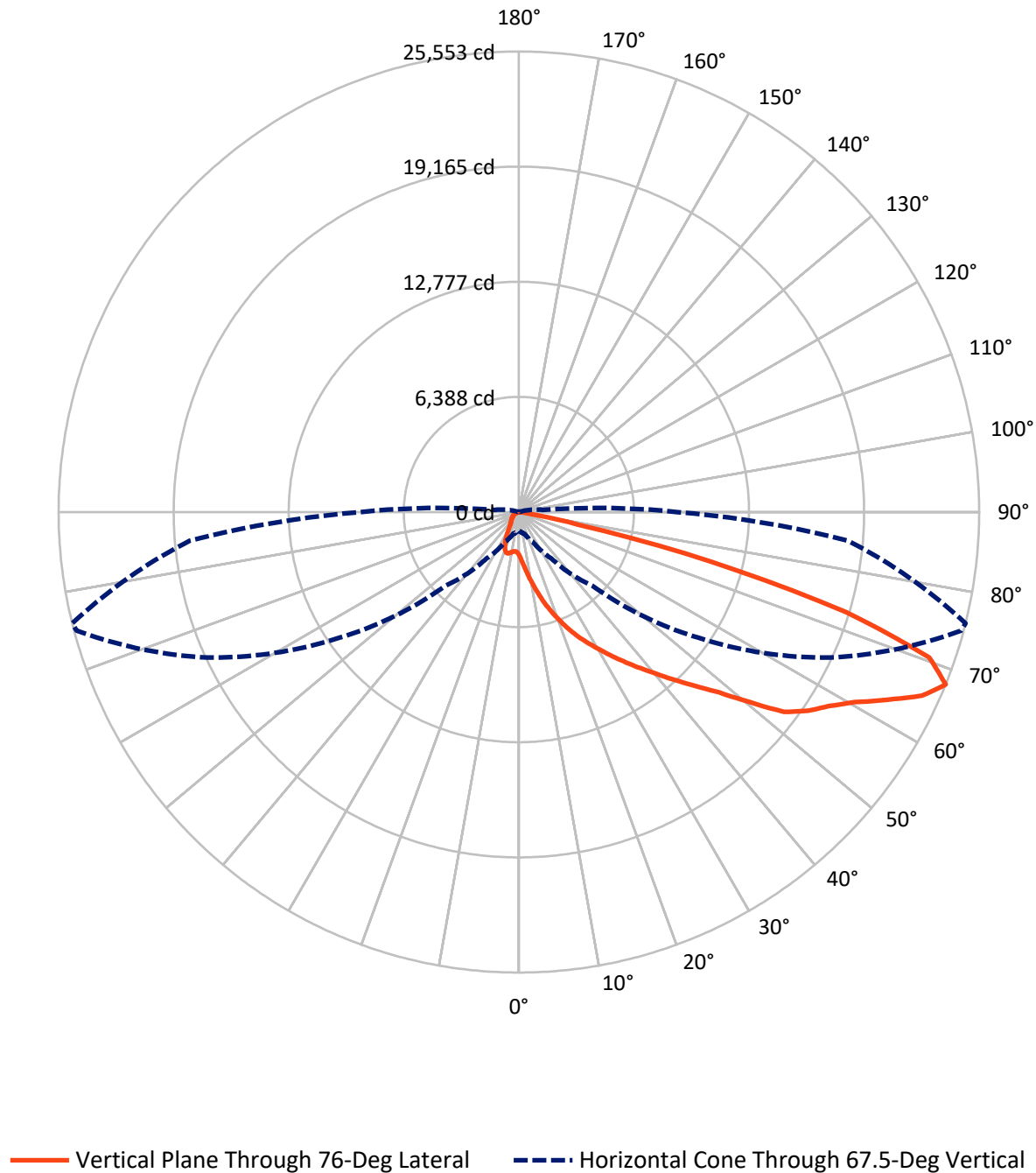
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.4 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1396.5	0.0	1396.5
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	26726.5	0.0	26726.5
	% Fixture	95.0	0.0	95.0
Total	Lumens	28123.0	0.0	28123.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.7	1.1
10°-20°	1176.0	4.2
20°-30°	2392.7	8.5
30°-40°	4153.0	14.8
40°-50°	5867.6	20.9
50°-60°	6654.1	23.7
60°-70°	5519.0	19.6
70°-80°	1999.1	7.1
80°-90°	64.8	0.2
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°	28123.0	100.0
0°-180°	28123.0	100.0

Coefficient of Utilization



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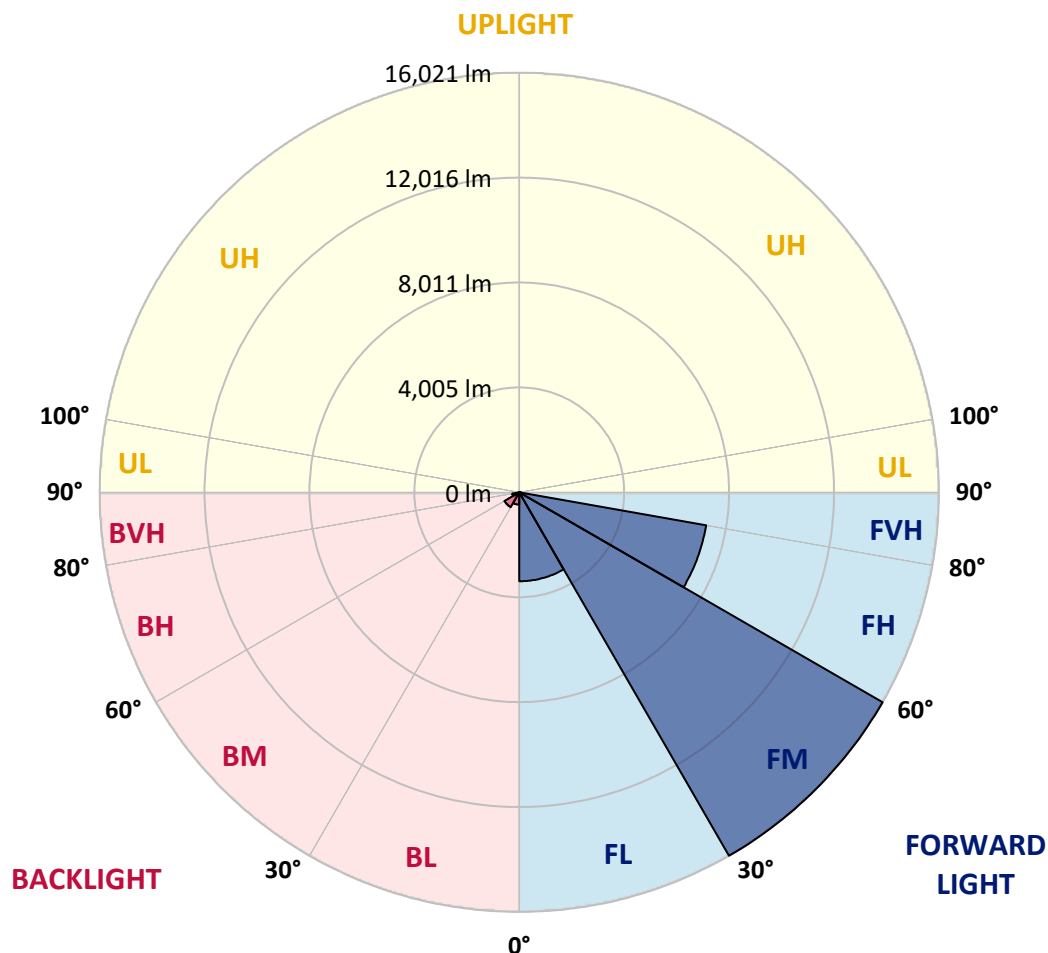
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3394.4	12.1			
FM	(30°-60°)	16021.1	57.0			
FH	(60°-80°)	7248.2	25.8			G3/7500
FVH	(80°-90°)	62.8	0.2			G1/100
BL	(0°-30°)	471.0	1.7	B1/500		
BM	(30°-60°)	653.6	2.3	B1/1000		
BH	(60°-80°)	269.9	1.0	B1/500		G1/500
BVH	(80°-90°)	2.0	0.0			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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2385.6	2385.6	2385.6	2385.6	2385.6	2385.6	2385.6	2385.6	2385.6	2385.6	2385.6
2.5°	3561.2	3481.1	3499.6	3447.8	3354.2	3162.0	2998.1	2842.8	2661.7	2655.5	2506.4
5°	4802.1	4734.3	4725.7	4621.0	4450.9	4124.4	3806.4	3444.2	3040.0	3010.4	2693.7
7.5°	5928.4	5874.2	5854.4	5730.0	5413.3	5095.4	4681.3	4149.0	3516.9	3462.6	2946.3
10°	6793.4	6767.5	6772.5	6683.7	6412.7	6116.9	5573.5	4894.5	4057.8	3974.0	3249.5
12.5°	7449.0	7455.1	7499.5	7445.3	7293.7	7074.4	6494.0	5689.3	4656.7	4542.1	3595.7
15°	7930.8	7961.6	8042.9	8110.7	8099.6	7909.8	7377.5	6496.4	5292.5	5165.6	3981.4
17.5°	8242.6	8277.1	8395.4	8545.7	8683.7	8639.3	8230.2	7275.2	5935.8	5789.1	4394.2
20°	8516.1	8556.8	8683.7	8882.1	9139.6	9195.1	8926.5	8030.6	6577.8	6399.1	4820.6
22.5°	9108.8	9107.6	9185.2	9301.1	9546.3	9689.2	9519.2	8731.8	7212.4	7026.3	5255.6
25°	10180.9	10140.2	10113.1	10021.9	10076.1	10164.9	10070.0	9387.3	7850.7	7662.2	5696.7
27.5°	11455.0	11479.7	11260.3	11015.1	10825.4	10734.2	10578.9	9994.8	8464.4	8257.3	6128.0
30°	12799.4	12806.8	12548.0	12235.1	11817.3	11471.1	11202.4	10575.2	9095.3	8869.8	6547.0
32.5°	14012.0	13963.9	13707.6	13281.2	12753.8	12364.4	11806.2	11223.4	9763.2	9545.0	7012.8
35°	14973.1	14916.4	14604.7	14216.5	13669.4	13277.5	12606.0	11870.3	10465.5	10252.4	7479.8
37.5°	15675.5	15609.0	15288.6	14889.3	14417.4	14189.4	13533.9	12573.9	11232.0	11002.8	7971.5
40°	15919.5	15861.6	15660.7	15368.7	14989.1	14937.4	14518.4	13383.5	12066.2	11822.3	8528.4
42.5°	15774.1	15717.4	15645.9	15547.4	15389.6	15438.9	15447.5	14306.5	12992.9	12752.6	9143.3
45°	15197.4	15146.9	15220.8	15365.0	15560.9	15804.9	16295.3	15298.4	14028.0	13771.7	9854.3
47.5°	14348.4	14311.4	14516.0	14875.8	15448.8	16121.6	17070.4	16340.9	15190.0	14952.2	10741.6
50°	13140.8	13134.6	13543.7	14200.5	15081.6	16274.4	17871.4	17526.4	16804.3	16554.1	11975.1
52.5°	11260.3	11272.7	12077.3	13128.4	14437.1	16170.9	18386.5	19049.4	18682.2	18422.2	13043.4
55°	9469.9	9543.8	10114.3	11630.0	13448.8	15786.4	18563.9	19760.4	19718.5	19472.1	13637.4
57.5°	7716.4	7850.7	8400.3	9816.1	12005.9	14900.4	18466.6	20068.5	20489.9	20301.4	14421.1
60°	5816.2	5877.9	6511.2	7834.7	10153.8	13283.7	17760.5	20236.1	21544.7	21414.1	15558.4
62.5°	3700.5	3854.5	4416.4	5693.0	7906.1	11038.5	16570.1	20233.6	22864.5	22936.0	17026.1
65°	1949.4	2129.3	2427.5	3527.9	5433.0	8530.9	14779.7	20043.9	24483.7	24583.5	18173.3
67.5°	1051.1	1102.9	1260.6	1831.1	3150.9	5779.3	12148.8	19107.3	25421.4	25553.3	18333.5
70°	768.9	797.3	856.4	1012.9	1585.9	3356.7	8864.8	16984.2	24212.6	24163.3	16289.2
72.5°	590.2	634.6	679.0	741.8	911.9	1791.7	5519.3	13299.7	19319.3	18994.0	12175.9
75°	465.8	473.2	536.0	592.7	683.9	1020.3	2451.0	7746.0	11791.4	11021.3	6314.1
77.5°	372.1	377.1	414.0	463.3	549.6	670.3	759.1	3047.4	3764.5	3359.1	1370.3
80°	220.6	232.9	308.1	357.4	455.9	422.7	277.3	661.7	587.8	532.3	230.4
82.5°	123.2	133.1	173.7	282.2	317.9	202.1	138.0	178.7	138.0	134.3	65.3
85°	0.0	6.2	112.1	175.0	129.4	44.4	57.9	59.1	40.7	38.2	25.9
87.5°	0.0	0.0	34.5	33.3	4.9	7.4	13.6	19.7	16.0	16.0	13.6
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°	2385.6	2385.6	2385.6	2385.6	2385.6	2385.6	2385.6	2385.6	2385.6	2385.6	2385.6
2.5°	2432.5	2365.9	2240.2	2117.0	2013.5	1928.5	1852.1	1821.3	1796.6	1792.9	1773.2
5°	2540.9	2406.6	2166.3	1969.1	1837.3	1743.6	1663.5	1614.3	1576.1	1561.3	1547.7
7.5°	2704.8	2501.5	2156.4	1929.7	1772.0	1614.3	1466.4	1306.2	1206.4	1168.2	1146.0
10°	2904.4	2627.2	2193.4	1918.6	1642.6	1309.9	1064.7	861.3	778.8	751.7	744.3
12.5°	3137.3	2783.7	2257.5	1849.6	1366.6	930.4	734.4	665.4	646.9	638.3	638.3
15°	3404.7	2954.9	2303.1	1650.0	1010.4	703.6	635.8	603.8	584.1	573.0	574.2
17.5°	3678.3	3122.5	2280.9	1360.4	745.5	626.0	575.5	541.0	513.9	502.8	500.3
20°	3954.3	3277.8	2157.7	1012.9	630.9	568.1	511.4	473.2	446.1	435.0	432.5
22.5°	4240.2	3409.6	1940.8	743.0	566.8	504.0	448.5	410.3	384.5	374.6	369.7
25°	4518.7	3516.9	1637.7	601.3	506.5	443.6	390.6	354.9	331.5	321.6	320.4
27.5°	4778.7	3584.6	1286.5	531.1	453.5	389.4	341.3	309.3	289.6	282.2	281.0
30°	5012.8	3590.8	951.3	479.3	406.6	342.6	298.2	269.9	252.6	245.2	242.8
32.5°	5249.4	3539.0	692.5	432.5	363.5	301.9	258.8	236.6	224.3	218.1	218.1
35°	5472.4	3419.5	539.7	391.9	321.6	262.5	228.0	211.9	204.6	198.4	198.4
37.5°	5690.6	3248.2	458.4	356.1	282.2	229.2	200.9	191.0	184.8	178.7	178.7
40°	5912.4	3032.6	416.5	322.9	250.1	203.3	178.7	170.1	163.9	159.0	157.7
42.5°	6184.7	2783.7	389.4	292.0	221.8	179.9	157.7	147.9	142.9	138.0	135.5
45°	6500.1	2569.3	367.2	261.2	198.4	160.2	136.8	126.9	119.5	113.4	112.1
47.5°	6954.8	2414.0	337.6	228.0	176.2	139.2	118.3	107.2	96.1	90.0	88.7
50°	7535.2	2285.8	299.4	198.4	154.0	118.3	98.6	85.0	75.2	69.0	69.0
52.5°	7823.6	2118.2	264.9	172.5	129.4	99.8	80.1	64.1	59.1	53.0	53.0
55°	7939.4	1990.1	230.4	146.6	107.2	82.6	62.8	49.3	45.6	41.9	40.7
57.5°	8264.7	1953.1	200.9	124.5	88.7	65.3	48.1	37.0	34.5	29.6	29.6
60°	8788.4	1971.6	173.7	106.0	71.5	50.5	35.7	28.3	25.9	20.9	20.9
62.5°	9354.0	1948.2	146.6	91.2	55.5	37.0	24.6	20.9	20.9	12.3	11.1
65°	9462.5	1735.0	125.7	75.2	43.1	27.1	16.0	13.6	18.5	2.5	0.0
67.5°	8782.3	1345.6	108.4	57.9	32.0	20.9	12.3	6.2	16.0	0.0	0.0
70°	7022.6	855.2	87.5	41.9	24.6	17.3	9.9	2.5	12.3	0.0	0.0
72.5°	4966.0	496.6	69.0	29.6	20.9	13.6	7.4	0.0	7.4	0.0	0.0
75°	2511.3	264.9	43.1	22.2	16.0	9.9	4.9	0.0	1.2	0.0	0.0
77.5°	543.4	123.2	27.1	16.0	11.1	6.2	2.5	0.0	0.0	0.0	0.0
80°	118.3	54.2	17.3	9.9	6.2	3.7	0.0	0.0	0.0	0.0	0.0
82.5°	43.1	28.3	8.6	4.9	2.5	0.0	0.0	0.0	0.0	0.0	0.0
85°	23.4	14.8	4.9	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.3	4.9	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)