

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: P397916

Luminaire Tested: **ARCH-S-PA1-60-740-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397916
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-60-740-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6164 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

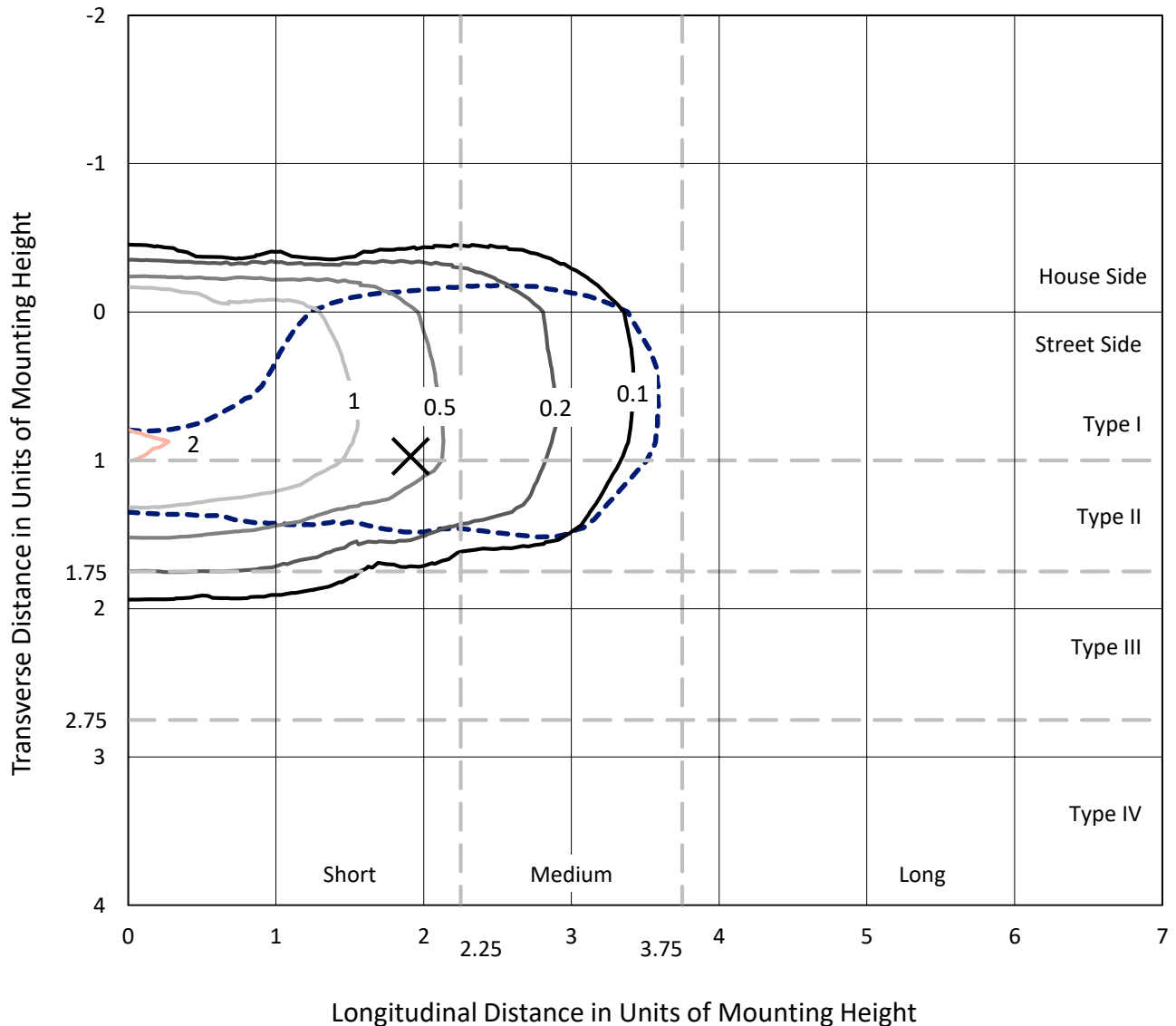
Input Watts (W): 64
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

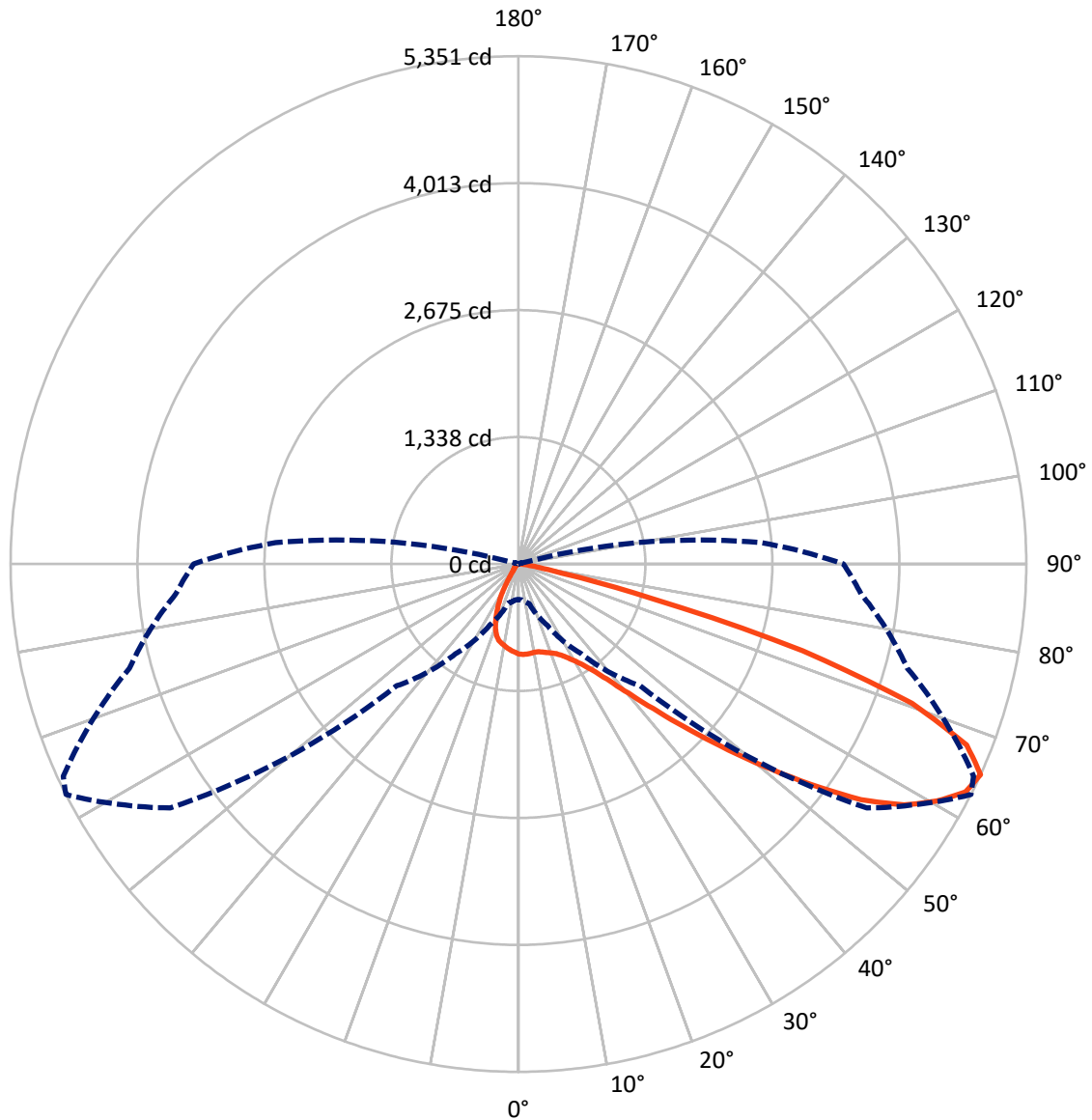
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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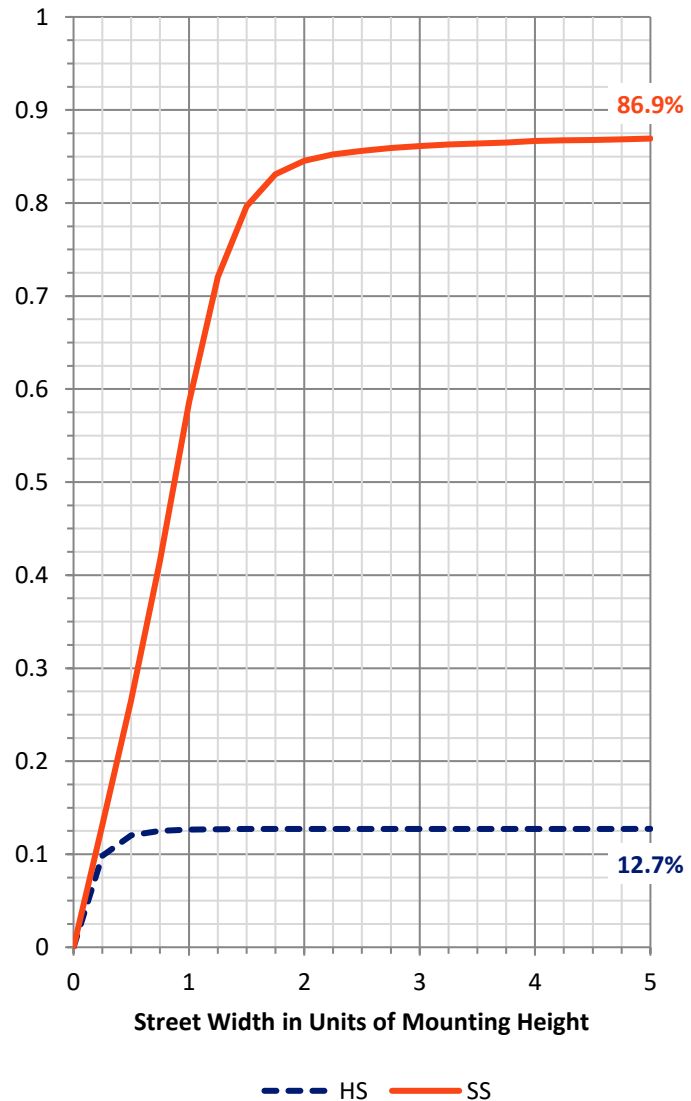
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	793.3	0.0	793.3
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	5370.7	0.0	5370.7
	% Fixture	87.1	0.0	87.1
Total	Lumens	6164.0	0.0	6164.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.7	1.4
10°-20°	213.7	3.5
20°-30°	316.8	5.1
30°-40°	588.2	9.5
40°-50°	1246.2	20.2
50°-60°	1723.1	28.0
60°-70°	1379.4	22.4
70°-80°	573.1	9.3
80°-90°	36.8	0.6
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°	6164.0	100.0
0°-180°	6164.0	100.0



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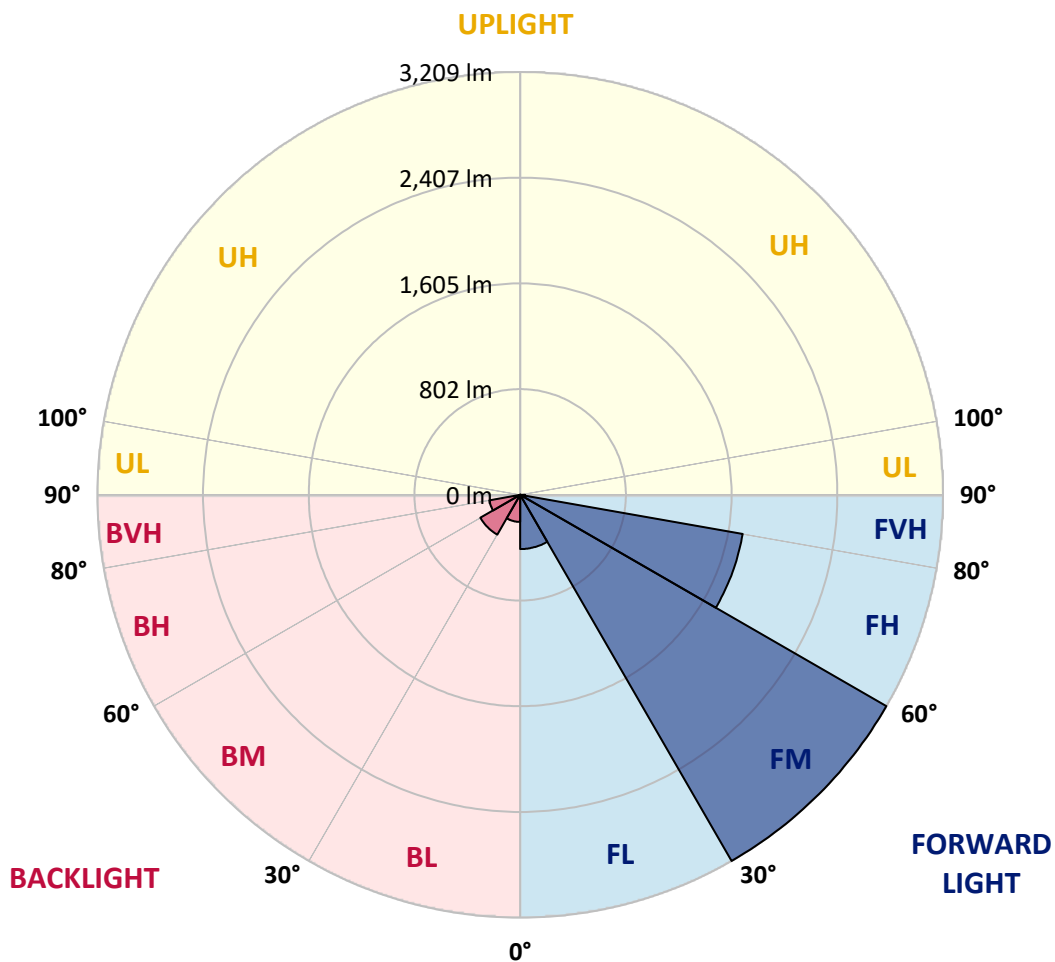
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	411.6	6.7			
FM	(30°-60°)	3209.0	52.1			
FH	(60°-80°)	1715.0	27.8			G1/1800
FVH	(80°-90°)	35.1	0.6			G1/100
BL	(0°-30°)	205.6	3.3	B1/500		
BM	(30°-60°)	348.5	5.7	B1/1000		
BH	(60°-80°)	237.5	3.9	B1/500		G1/500
BVH	(80°-90°)	1.7	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-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	949.6	949.6	949.6	949.6	949.6	949.6	949.6	949.6	949.6	949.6	949.6
2.5°	965.9	963.5	961.2	960.0	960.0	958.9	954.2	953.1	950.7	948.4	946.1
5°	956.5	953.1	951.9	953.1	954.2	956.5	954.2	954.2	951.9	949.6	944.9
7.5°	933.3	930.9	932.1	935.6	936.8	944.9	946.1	949.6	949.6	947.2	943.7
10°	905.3	904.2	904.2	910.0	915.8	927.5	935.6	944.9	946.1	946.1	940.3
12.5°	884.4	883.2	886.7	893.7	905.3	920.5	934.4	948.4	950.7	951.9	942.6
15°	871.6	871.6	876.3	890.2	906.5	927.5	943.7	962.4	964.7	963.5	950.7
17.5°	860.0	861.1	870.4	893.7	912.3	940.3	960.0	981.0	982.2	981.0	960.0
20°	855.3	857.6	871.6	901.9	922.8	954.2	979.8	1000.8	1001.9	997.3	969.4
22.5°	868.1	869.3	886.7	919.3	939.1	974.0	1006.6	1026.4	1027.5	1020.6	983.3
25°	912.3	912.3	927.5	955.4	972.8	1007.8	1042.7	1065.9	1065.9	1057.8	1014.7
27.5°	1015.9	1006.6	1003.1	1011.2	1017.1	1054.3	1091.5	1120.6	1119.5	1107.8	1055.5
30°	1216.1	1192.8	1155.5	1113.6	1092.7	1118.3	1153.2	1190.5	1189.3	1170.7	1105.5
32.5°	1552.4	1518.6	1430.2	1319.6	1230.0	1200.9	1233.5	1274.2	1275.4	1253.3	1185.8
35°	2023.6	1970.1	1811.9	1658.3	1453.4	1342.9	1352.2	1396.4	1410.4	1398.8	1320.8
37.5°	2477.5	2428.6	2277.3	2064.4	1786.3	1560.5	1520.9	1559.3	1575.6	1575.6	1493.0
40°	2934.8	2877.8	2744.0	2529.9	2236.6	1900.3	1758.3	1789.7	1807.2	1810.7	1702.5
42.5°	3301.4	3264.1	3161.7	2995.3	2720.7	2496.1	2100.5	2083.0	2099.3	2086.5	1945.7
45°	3555.1	3526.0	3455.0	3392.1	3258.3	3145.4	2557.8	2440.2	2450.7	2406.5	2219.1
47.5°	3607.4	3574.8	3559.7	3647.0	3742.4	3770.3	3119.8	2865.0	2854.5	2756.8	2503.1
50°	3379.3	3382.8	3438.7	3687.7	4085.7	4337.1	3771.5	3344.4	3306.0	3088.4	2767.2
52.5°	2887.1	2943.0	3083.8	3487.6	4190.4	4749.0	4423.2	3853.0	3793.6	3410.8	2965.1
55°	2258.7	2330.9	2562.4	3026.7	3971.7	4932.9	4972.4	4381.3	4246.3	3652.8	3118.7
57.5°	1679.2	1701.3	1971.3	2394.9	3453.8	4752.5	5254.0	4788.6	4615.2	3846.0	3271.1
60°	1046.2	1060.1	1345.2	1823.5	2616.0	4085.7	5254.0	5069.0	4903.8	4019.4	3410.8
62.5°	650.5	655.2	762.2	1249.8	1778.1	3030.2	5036.4	5286.6	5154.0	4143.9	3530.6
65°	374.7	379.4	429.4	706.4	1156.7	1814.2	4480.2	5350.6	5291.3	4242.8	3623.7
67.5°	273.5	275.8	295.6	396.8	756.4	932.1	3365.4	5093.5	5167.9	4291.7	3621.4
70°	237.4	240.9	266.5	309.5	545.8	572.5	1712.9	4398.7	4607.0	4221.9	3513.2
72.5°	182.7	187.4	225.8	290.9	400.3	411.9	620.2	3130.3	3445.7	3785.5	3216.4
75°	125.7	130.3	168.7	239.7	330.5	308.4	341.0	1440.6	1817.7	2539.2	2448.4
77.5°	80.3	81.5	105.9	174.6	285.1	218.8	233.9	470.1	659.8	1148.6	1155.5
80°	53.5	54.7	65.2	112.9	195.5	202.5	144.3	217.6	238.6	335.1	232.7
82.5°	32.6	32.6	44.2	71.0	118.7	167.6	94.3	114.0	122.2	129.2	60.5
85°	12.8	12.8	26.8	46.5	74.5	78.0	59.3	66.3	69.8	75.6	27.9
87.5°	3.5	3.5	15.1	25.6	32.6	36.1	36.1	32.6	34.9	43.1	14.0
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	949.6	949.6	949.6	949.6	949.6	949.6	949.6	949.6	949.6	949.6	949.6
2.5°	944.9	941.4	936.8	932.1	927.5	924.0	920.5	920.5	918.1	914.7	912.3
5°	942.6	936.8	926.3	918.1	905.3	896.0	889.1	883.2	879.7	871.6	870.4
7.5°	939.1	932.1	917.0	900.7	879.7	863.5	847.2	835.5	823.9	814.6	812.3
10°	933.3	925.1	903.0	879.7	850.7	820.4	782.0	737.8	697.0	673.8	666.8
12.5°	933.3	922.8	893.7	862.3	820.4	745.9	648.2	550.4	474.8	441.0	431.7
15°	939.1	925.1	886.7	843.7	765.7	614.4	456.2	327.0	244.4	218.8	213.0
17.5°	944.9	925.1	876.3	818.1	665.6	445.7	259.5	172.2	145.5	139.6	139.6
20°	947.2	922.8	862.3	770.4	531.8	277.0	154.8	129.2	118.7	115.2	115.2
22.5°	956.5	924.0	851.8	701.7	386.3	162.9	122.2	108.2	97.7	94.3	94.3
25°	979.8	937.9	854.1	614.4	247.9	123.4	103.6	89.6	79.1	74.5	74.5
27.5°	1017.1	969.4	866.9	513.2	155.9	105.9	87.3	72.1	64.0	59.3	59.3
30°	1059.0	1004.3	872.8	396.8	116.4	89.6	71.0	57.0	51.2	47.7	46.5
32.5°	1132.3	1064.8	868.1	272.3	95.4	75.6	57.0	45.4	40.7	39.6	39.6
35°	1249.8	1170.7	858.8	171.1	79.1	60.5	45.4	37.2	33.7	32.6	31.4
37.5°	1409.2	1325.4	830.9	112.9	65.2	47.7	37.2	31.4	27.9	26.8	26.8
40°	1603.6	1502.3	777.3	86.1	55.9	38.4	31.4	26.8	24.4	23.3	23.3
42.5°	1825.8	1699.0	692.4	74.5	46.5	32.6	26.8	22.1	20.9	19.8	19.8
45°	2069.0	1905.0	574.9	66.3	39.6	26.8	22.1	19.8	17.5	17.5	16.3
47.5°	2327.4	2112.1	442.2	58.2	33.7	23.3	19.8	16.3	15.1	14.0	14.0
50°	2576.4	2297.1	310.7	50.0	27.9	19.8	16.3	14.0	12.8	11.6	11.6
52.5°	2752.1	2408.8	219.9	43.1	23.3	17.5	12.8	10.5	9.3	9.3	9.3
55°	2892.9	2478.7	153.6	36.1	19.8	15.1	10.5	8.1	8.1	7.0	7.0
57.5°	3025.6	2524.0	112.9	30.3	16.3	11.6	8.1	5.8	5.8	4.7	4.7
60°	3162.9	2548.5	86.1	24.4	14.0	9.3	5.8	4.7	3.5	3.5	3.5
62.5°	3301.4	2563.6	66.3	19.8	11.6	7.0	4.7	3.5	2.3	1.2	1.2
65°	3422.4	2568.3	51.2	15.1	9.3	4.7	3.5	1.2	0.0	0.0	0.0
67.5°	3458.5	2514.7	39.6	11.6	7.0	3.5	2.3	0.0	0.0	0.0	0.0
70°	3360.7	2372.8	30.3	9.3	5.8	2.3	1.2	0.0	0.0	0.0	0.0
72.5°	2982.5	1989.9	23.3	5.8	4.7	2.3	1.2	0.0	0.0	0.0	0.0
75°	2134.2	1061.3	16.3	4.7	3.5	1.2	0.0	0.0	0.0	0.0	0.0
77.5°	982.2	410.8	11.6	3.5	2.3	1.2	0.0	0.0	0.0	0.0	0.0
80°	192.0	102.4	4.7	2.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	44.2	17.5	2.3	2.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.1	5.8	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.8	2.3	1.2	0.0	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)