

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: P398161

Luminaire Tested: **ARCH-S-PA1-90-827-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398161
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-90-827-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6151 lumens
Efficiency: N/A
Efficacy: 65.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

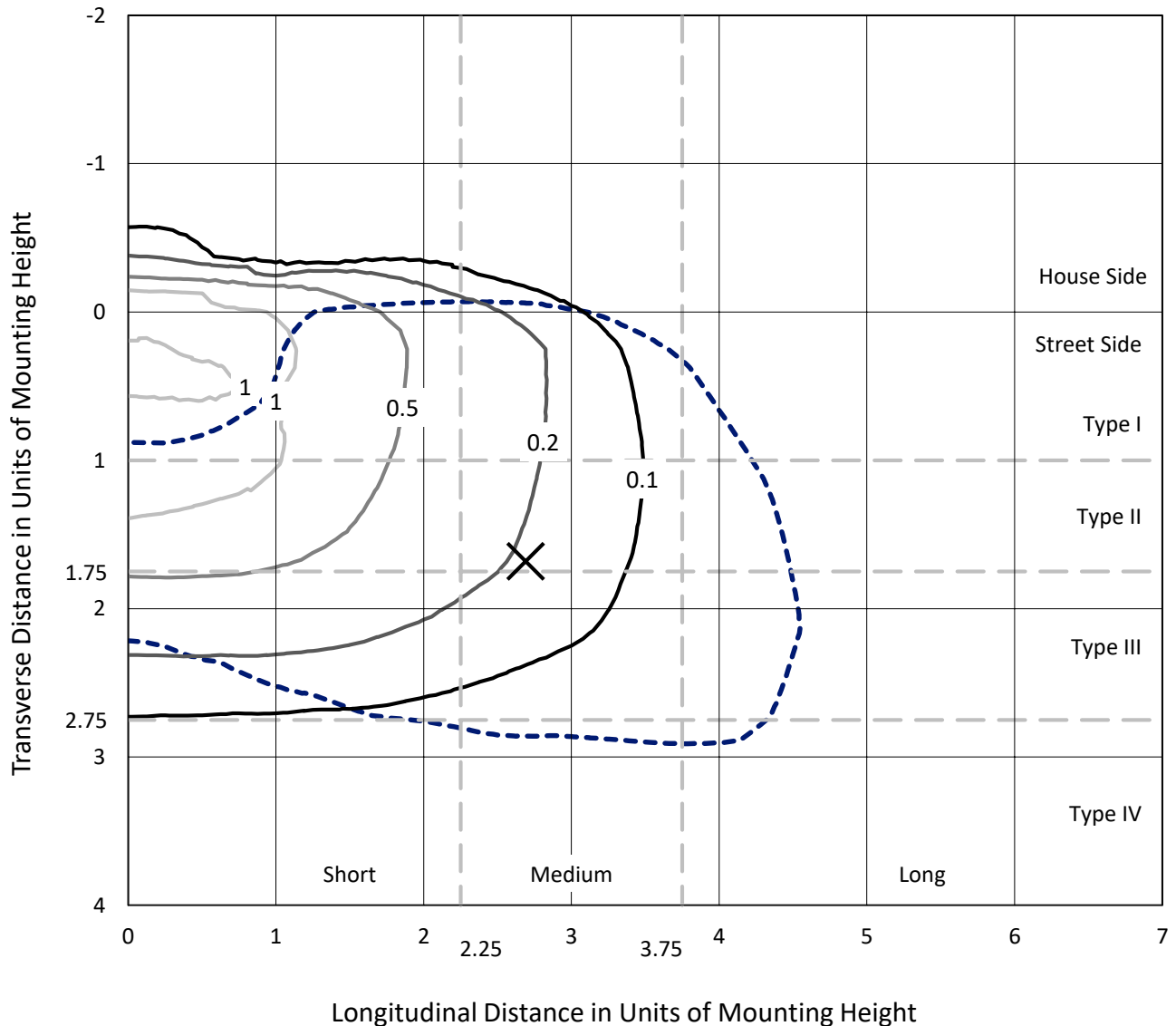
Input Watts (W): 94
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

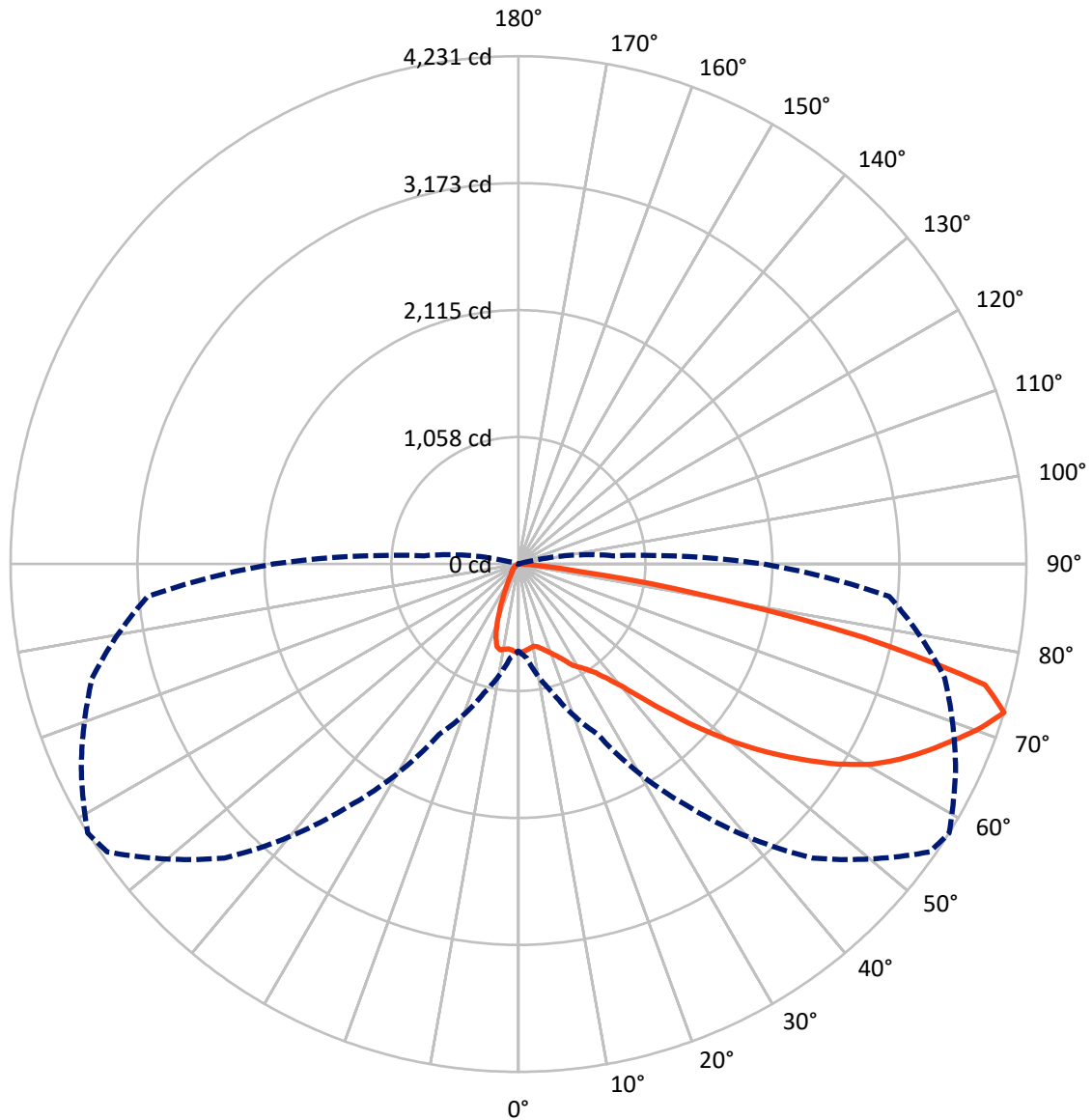


Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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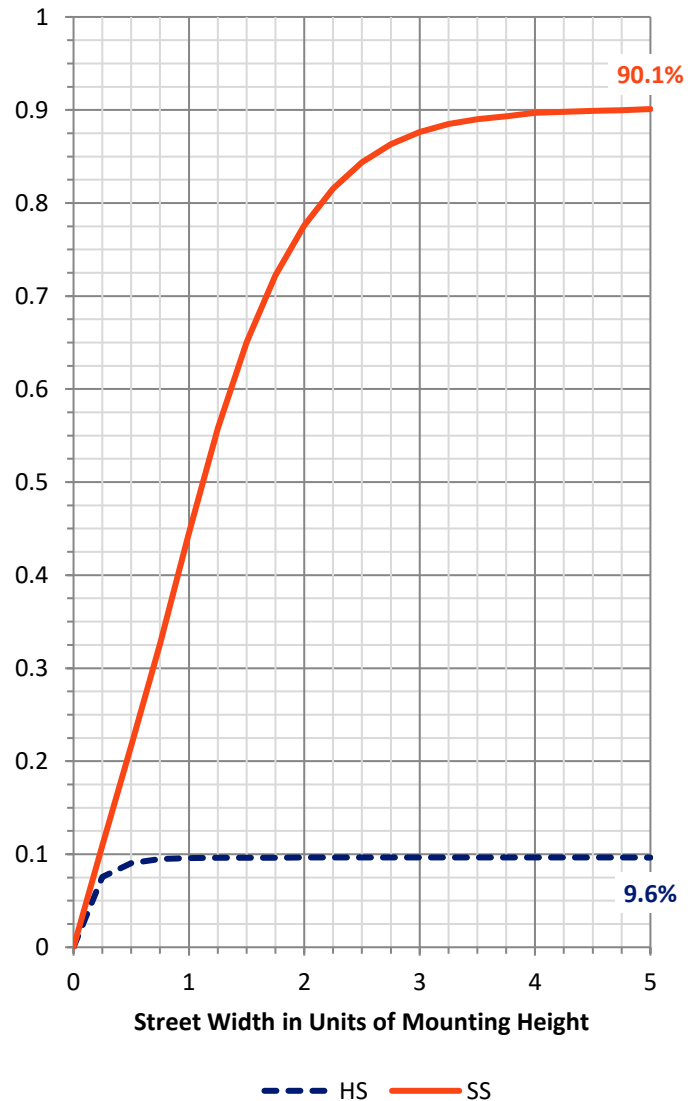
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	598.2	0.0	598.2
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	5552.9	0.0	5552.9
	% Fixture	90.3	0.0	90.3
Total	Lumens	6151.0	0.0	6151.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.7	1.1
10°-20°	176.4	2.9
20°-30°	277.2	4.5
30°-40°	478.0	7.8
40°-50°	909.4	14.8
50°-60°	1440.2	23.4
60°-70°	1680.5	27.3
70°-80°	1052.5	17.1
80°-90°	69.1	1.1
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°	6151.0	100.0
0°-180°	6151.0	100.0

Coefficient of Utilization



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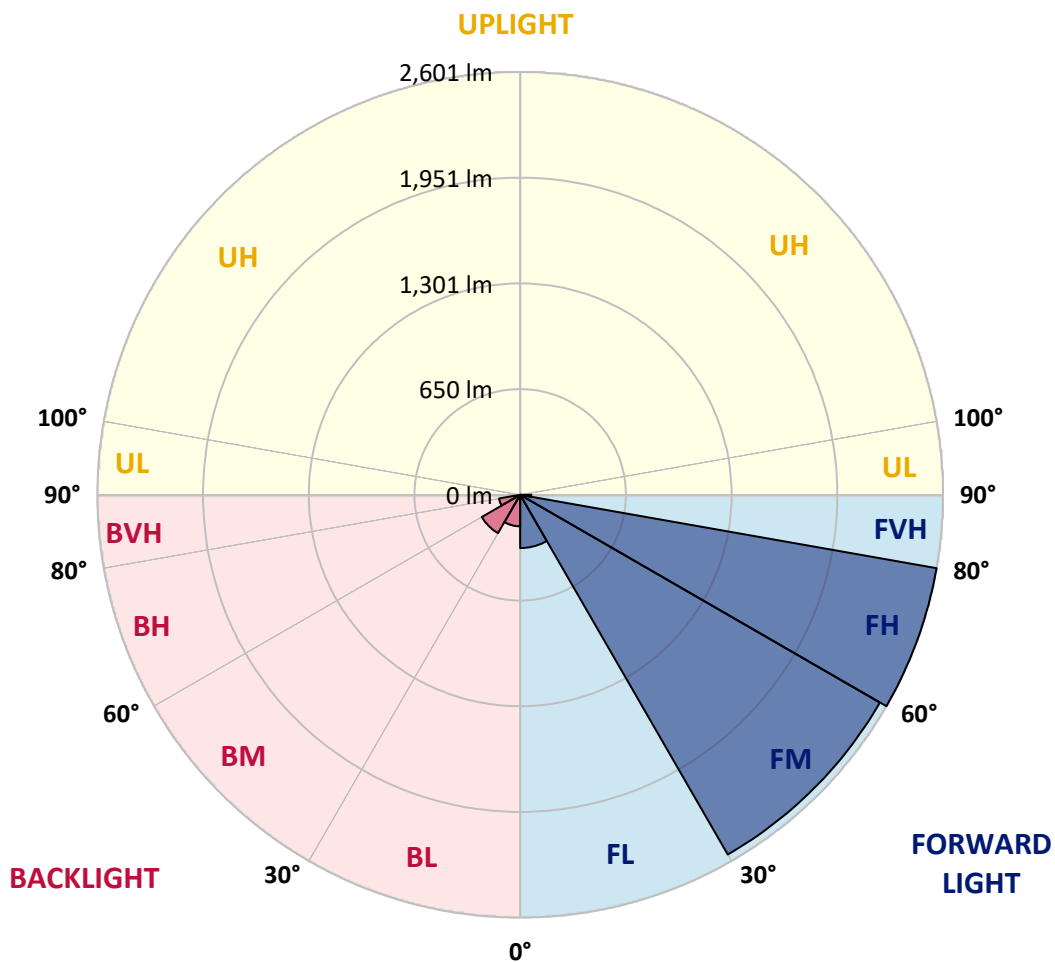
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	327.6	5.3			
FM	(30°-60°)	2555.4	41.5			
FH	(60°-80°)	2601.4	42.3			G2/5000
FVH	(80°-90°)	68.4	1.1			G1/100
BL	(0°-30°)	193.7	3.1	B1/500		
BM	(30°-60°)	272.2	4.4	B1/1000		
BH	(60°-80°)	131.6	2.1	B1/500		G1/500
BVH	(80°-90°)	0.7	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-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1
2.5°	734.8	731.5	730.4	729.3	730.4	731.5	728.2	731.5	729.3	730.4	732.6
5°	708.4	705.1	704.0	705.1	708.4	713.9	716.1	719.4	719.4	722.7	723.8
7.5°	678.7	676.5	675.4	677.6	684.2	696.3	702.9	707.3	711.7	718.3	724.9
10°	662.2	661.1	660.0	663.3	669.9	680.9	689.7	696.3	712.8	731.5	743.6
12.5°	651.2	651.2	653.4	660.0	668.8	677.6	698.5	707.3	732.6	761.2	777.7
15°	642.4	642.4	645.7	657.8	669.9	690.8	721.6	731.5	761.2	796.4	818.4
17.5°	635.8	638.0	640.2	652.3	675.4	710.6	746.9	761.2	797.5	836.0	860.2
20°	636.9	639.1	640.2	652.3	685.3	733.7	779.9	796.4	838.2	878.9	903.1
22.5°	643.5	646.8	647.9	664.4	702.9	757.9	817.3	836.0	881.1	924.0	942.7
25°	671.0	673.2	666.6	680.9	728.2	795.3	865.7	885.5	930.6	970.2	985.6
27.5°	764.5	766.7	730.4	713.9	748.0	826.1	925.1	952.6	1008.7	1035.1	1037.3
30°	966.9	969.1	897.6	819.5	795.3	852.5	958.1	996.6	1069.2	1098.9	1085.7
32.5°	1227.6	1225.4	1127.5	1012.0	907.5	898.7	1005.4	1046.1	1125.3	1153.9	1144.0
35°	1489.4	1492.7	1409.1	1235.3	1085.7	985.6	1065.9	1113.2	1208.9	1249.6	1232.0
37.5°	1668.7	1690.7	1654.4	1466.3	1304.6	1146.2	1163.8	1214.4	1334.3	1389.3	1351.9
40°	1921.7	1916.2	1828.2	1689.6	1546.6	1383.8	1322.2	1346.4	1483.9	1557.6	1499.3
42.5°	2261.5	2250.5	2101.0	1965.7	1806.2	1673.1	1547.7	1543.3	1655.5	1741.3	1656.6
45°	2569.5	2553.0	2450.7	2319.8	2144.9	1992.1	1822.7	1784.2	1862.3	1934.9	1835.9
47.5°	2814.8	2787.3	2714.7	2645.4	2602.5	2364.9	2110.8	2052.6	2092.2	2146.0	2006.4
50°	3105.2	3029.3	2923.7	2881.9	2971.0	2787.3	2388.0	2331.9	2329.7	2360.5	2182.3
52.5°	3237.2	3099.7	3040.3	3075.5	3232.8	3180.0	2687.2	2606.9	2575.0	2578.3	2346.2
55°	3077.7	3062.3	3094.2	3204.2	3409.9	3379.1	2974.3	2875.3	2828.0	2768.6	2503.5
57.5°	2896.2	2943.5	3070.0	3280.1	3634.3	3587.0	3257.0	3144.8	3057.9	2921.5	2678.4
60°	2729.0	2777.4	2986.4	3297.7	3757.5	3787.2	3492.4	3385.7	3257.0	3077.7	2870.9
62.5°	2474.9	2512.3	2806.0	3272.4	3703.6	3903.8	3656.3	3576.0	3456.1	3226.2	3092.0
65°	2188.9	2213.1	2503.5	3070.0	3598.0	3890.6	3791.6	3746.5	3629.9	3381.3	3310.9
67.5°	1875.5	1904.1	2146.0	2705.9	3391.2	3829.0	3919.2	3914.8	3781.7	3552.9	3469.3
70°	1514.7	1516.9	1717.1	2243.9	3030.4	3705.8	4077.6	4087.5	3926.9	3681.6	3475.9
72.5°	724.9	784.3	1113.2	1566.4	2462.8	3463.8	4181.0	4230.5	4018.2	3677.2	3100.8
75°	166.1	171.6	324.5	744.7	1444.3	2658.6	3922.5	4014.9	3796.0	3180.0	2184.5
77.5°	60.5	63.8	91.3	217.8	555.5	1373.9	2807.1	2942.4	2806.0	2055.9	1032.9
80°	40.7	39.6	47.3	96.8	255.2	389.4	1435.5	1515.8	1383.8	701.8	247.5
82.5°	20.9	22.0	33.0	53.9	171.6	135.3	479.6	521.4	429.0	140.8	46.2
85°	9.9	9.9	18.7	34.1	72.6	47.3	106.7	128.7	115.5	61.6	15.4
87.5°	9.9	9.9	17.6	22.0	37.4	19.8	26.4	33.0	30.8	33.0	5.5
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°	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1
2.5°	732.6	731.5	730.4	732.6	731.5	733.7	733.7	735.9	735.9	733.7	732.6
5°	722.7	720.5	718.3	718.3	717.2	719.4	726.0	731.5	732.6	729.3	728.2
7.5°	723.8	723.8	721.6	717.2	709.5	709.5	709.5	716.1	719.4	717.2	716.1
10°	743.6	744.7	739.2	729.3	716.1	704.0	680.9	646.8	614.9	606.1	602.8
12.5°	777.7	778.8	767.8	750.2	722.7	651.2	563.2	481.8	419.1	401.5	398.2
15°	818.4	819.5	799.7	771.1	687.5	521.4	390.5	298.1	243.1	229.9	228.8
17.5°	860.2	858.0	828.3	773.3	583.0	369.6	237.6	190.3	176.0	172.7	173.8
20°	900.9	894.3	853.6	732.6	448.8	242.0	173.8	162.8	159.5	157.3	157.3
22.5°	938.3	925.1	874.5	652.3	314.6	173.8	155.1	152.9	148.5	145.2	144.1
25°	975.7	957.0	887.7	547.8	211.2	151.8	146.3	141.9	136.4	132.0	130.9
27.5°	1020.8	994.4	881.1	415.8	158.4	140.8	136.4	129.8	122.1	115.5	113.3
30°	1063.7	1034.0	843.7	287.1	135.3	129.8	123.2	113.3	103.4	95.7	93.5
32.5°	1117.6	1083.5	776.6	188.1	117.7	113.3	106.7	94.6	81.4	72.6	70.4
35°	1194.6	1156.1	690.8	132.0	103.4	95.7	86.9	73.7	59.4	52.8	51.7
37.5°	1302.4	1250.7	583.0	106.7	91.3	80.3	67.1	53.9	44.0	38.5	37.4
40°	1434.4	1355.2	463.1	94.6	81.4	67.1	50.6	38.5	31.9	27.5	27.5
42.5°	1577.4	1453.1	341.0	86.9	71.5	55.0	37.4	27.5	23.1	20.9	19.8
45°	1724.8	1540.0	229.9	80.3	62.7	41.8	26.4	18.7	15.4	15.4	14.3
47.5°	1877.7	1598.3	148.5	72.6	52.8	30.8	17.6	13.2	11.0	11.0	11.0
50°	2029.5	1629.1	105.6	66.0	42.9	20.9	13.2	9.9	8.8	8.8	8.8
52.5°	2139.4	1609.3	84.7	57.2	33.0	15.4	9.9	7.7	6.6	6.6	6.6
55°	2235.1	1575.2	73.7	49.5	24.2	11.0	7.7	6.6	5.5	5.5	5.5
57.5°	2333.0	1531.2	66.0	41.8	17.6	7.7	5.5	4.4	4.4	4.4	4.4
60°	2422.1	1456.4	57.2	33.0	12.1	5.5	4.4	3.3	3.3	3.3	3.3
62.5°	2509.0	1392.6	49.5	25.3	8.8	4.4	2.2	2.2	1.1	1.1	1.1
65°	2558.5	1306.8	39.6	16.5	5.5	3.3	1.1	1.1	0.0	0.0	0.0
67.5°	2543.1	1204.5	27.5	9.9	3.3	2.2	1.1	0.0	0.0	0.0	0.0
70°	2436.4	1067.0	16.5	5.5	3.3	2.2	1.1	0.0	0.0	0.0	0.0
72.5°	2040.5	789.8	9.9	4.4	2.2	1.1	0.0	0.0	0.0	0.0	0.0
75°	1362.9	363.0	5.5	3.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	623.7	108.9	3.3	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	125.4	28.6	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	26.4	5.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	5.5	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	1.1	0.0	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)