

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: P398098

Luminaire Tested: **ARCH-S-PA1-80-830-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398098
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-PA1-80-830-U-T3-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1050mA 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: 6203 lumens
Efficiency: N/A
Efficacy: 74.7 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

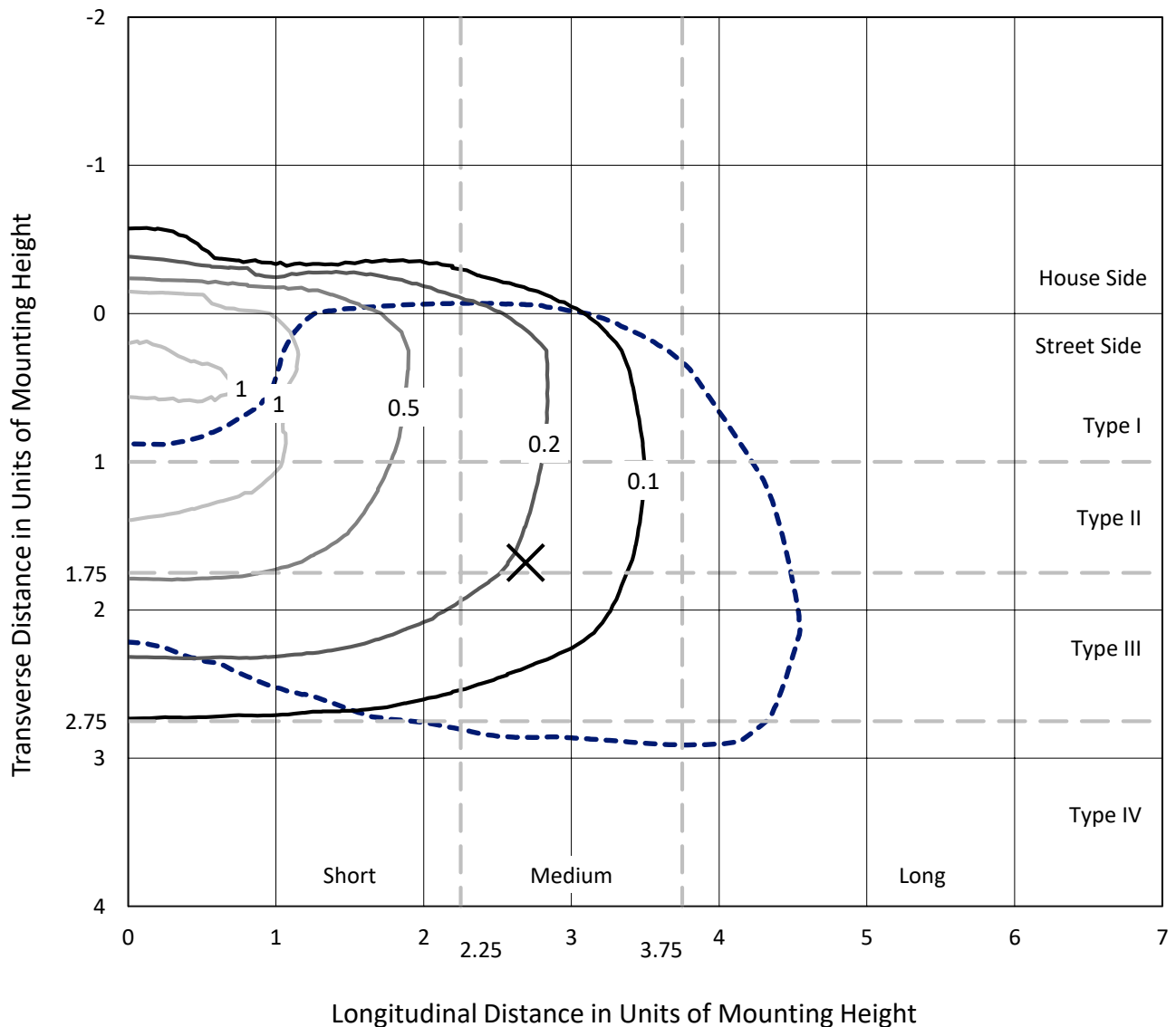
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

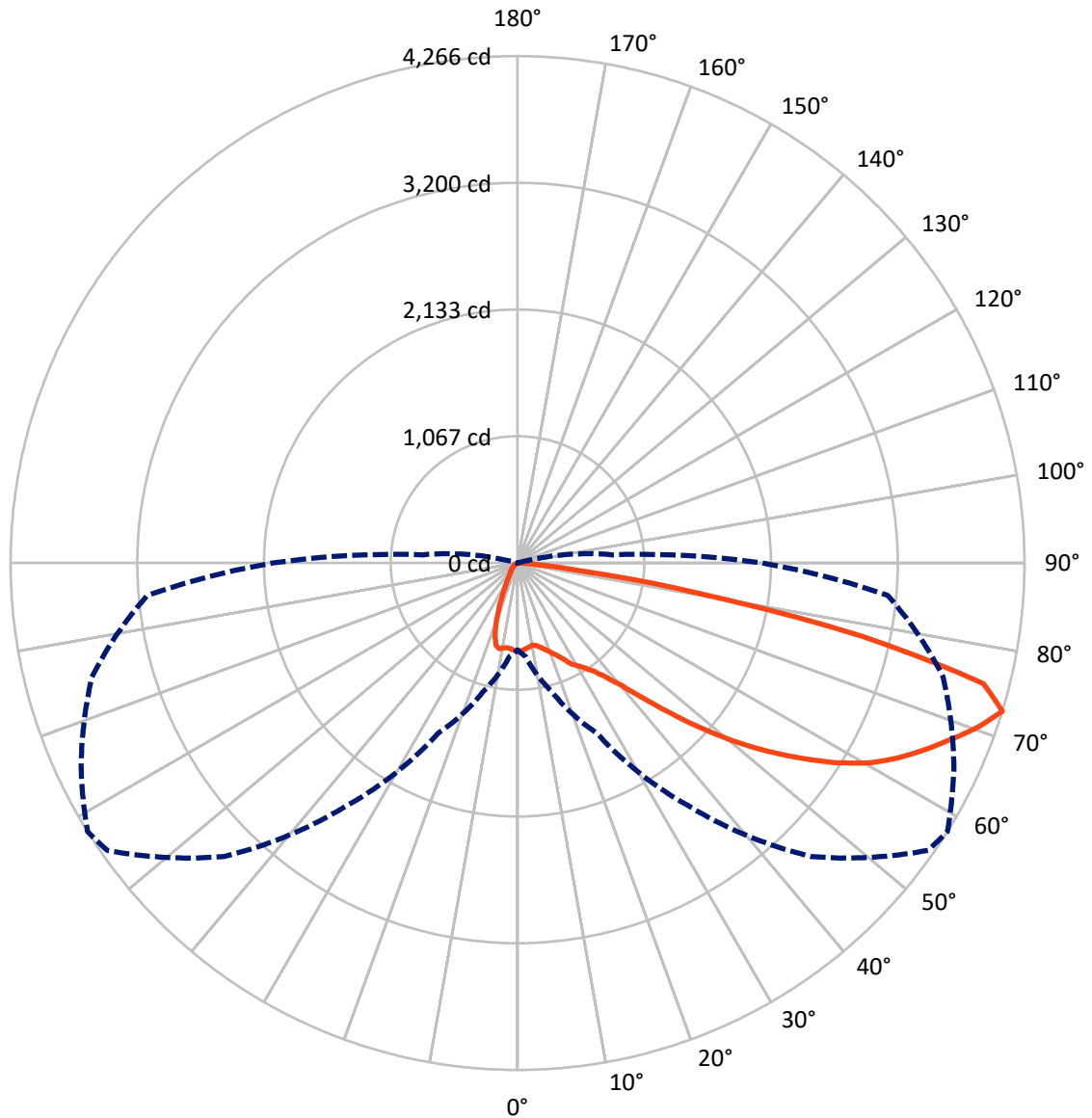


Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
 Type IV - Medium - Non-Cutoff

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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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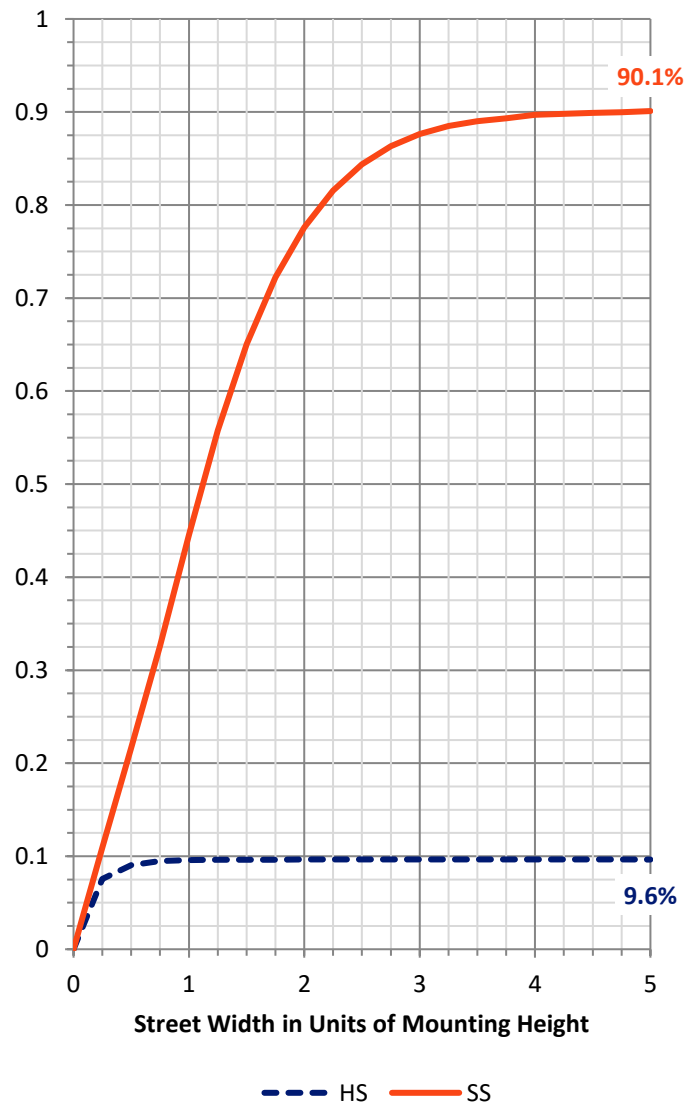
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	603.2	0.0	603.2
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	5599.8	0.0	5599.8
	% Fixture	90.3	0.0	90.3
Total	Lumens	6203.0	0.0	6203.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.3	1.1
10°-20°	177.9	2.9
20°-30°	279.5	4.5
30°-40°	482.0	7.8
40°-50°	917.1	14.8
50°-60°	1452.4	23.4
60°-70°	1694.7	27.3
70°-80°	1061.4	17.1
80°-90°	69.7	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°	6203.0	100.0
0°-180°	6203.0	100.0



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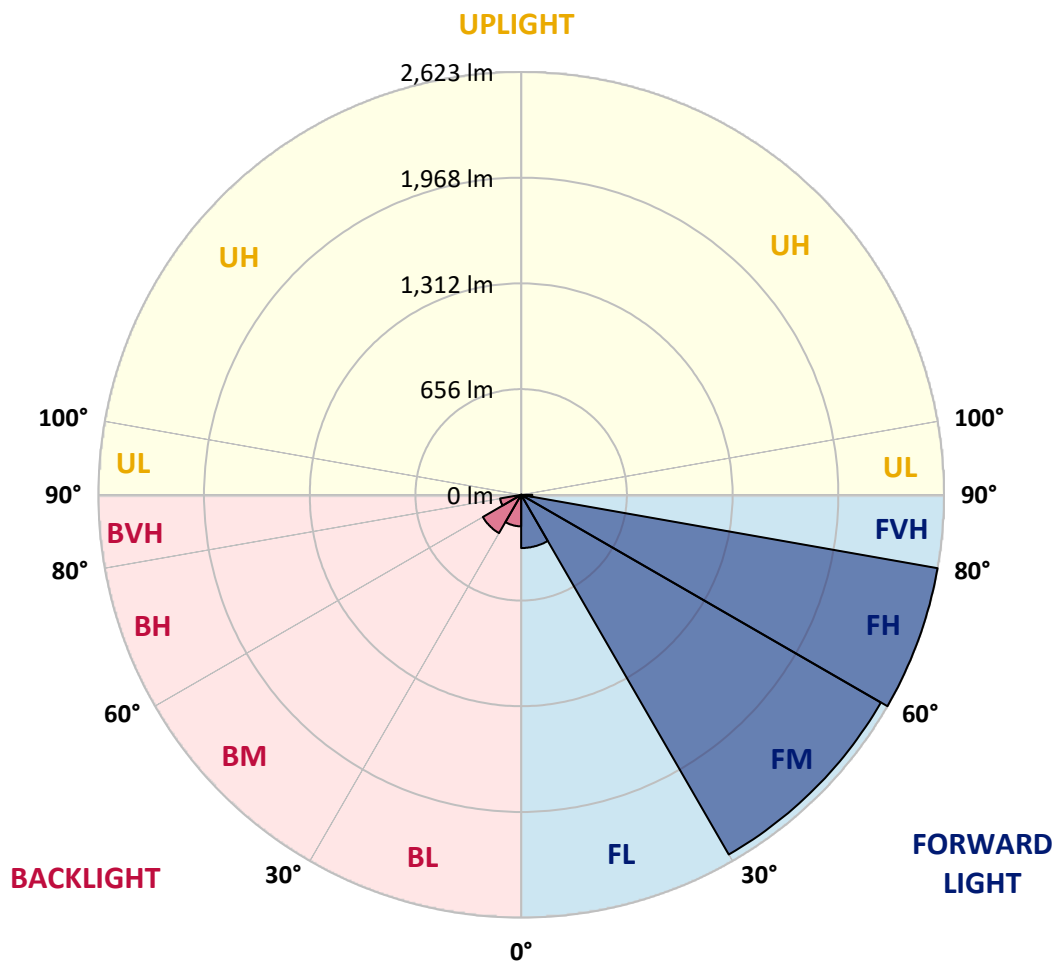
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	330.4	5.3			
FM	(30°-60°)	2577.0	41.5			
FH	(60°-80°)	2623.4	42.3			G2/5000
FVH	(80°-90°)	69.0	1.1			G1/100
BL	(0°-30°)	195.3	3.1	B1/500		
BM	(30°-60°)	274.5	4.4	B1/1000		
BH	(60°-80°)	132.7	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°	744.3	744.3	744.3	744.3	744.3	744.3	744.3	744.3	744.3	744.3	744.3
2.5°	741.0	737.7	736.6	735.4	736.6	737.7	734.3	737.7	735.4	736.6	738.8
5°	714.4	711.0	709.9	711.0	714.4	719.9	722.1	725.5	725.5	728.8	729.9
7.5°	684.4	682.2	681.1	683.3	690.0	702.2	708.8	713.3	717.7	724.4	731.0
10°	667.8	666.7	665.6	668.9	675.5	686.6	695.5	702.2	718.8	737.7	749.9
12.5°	656.7	656.7	658.9	665.6	674.4	683.3	704.4	713.3	738.8	767.6	784.3
15°	647.8	647.8	651.1	663.3	675.5	696.6	727.7	737.7	767.6	803.1	825.3
17.5°	641.2	643.4	645.6	657.8	681.1	716.6	753.2	767.6	804.2	843.0	867.5
20°	642.3	644.5	645.6	657.8	691.1	739.9	786.5	803.1	845.3	886.3	910.7
22.5°	648.9	652.3	653.4	670.0	708.8	764.3	824.2	843.0	888.5	931.8	950.6
25°	676.7	678.9	672.2	686.6	734.3	802.0	873.0	893.0	938.4	978.4	993.9
27.5°	770.9	773.2	736.6	719.9	754.3	833.1	932.9	960.6	1017.2	1043.8	1046.0
30°	975.1	977.3	905.2	826.4	802.0	859.7	966.2	1005.0	1078.2	1108.2	1094.9
32.5°	1237.9	1235.7	1137.0	1020.5	915.2	906.3	1013.9	1054.9	1134.8	1163.6	1153.6
35°	1502.0	1505.3	1421.0	1245.7	1094.9	993.9	1074.9	1122.6	1219.1	1260.1	1242.4
37.5°	1682.8	1705.0	1668.3	1478.7	1315.6	1155.9	1173.6	1224.6	1345.5	1401.0	1363.3
40°	1937.9	1932.4	1843.6	1703.8	1559.6	1395.5	1333.3	1357.8	1496.4	1570.7	1511.9
42.5°	2280.7	2269.6	2118.7	1982.3	1821.4	1687.2	1560.7	1556.3	1669.5	1756.0	1670.6
45°	2591.3	2574.6	2471.5	2339.5	2163.1	2008.9	1838.1	1799.2	1878.0	1951.2	1851.4
47.5°	2838.6	2810.9	2737.7	2667.8	2624.5	2384.9	2128.7	2069.9	2109.8	2164.2	2023.3
50°	3131.5	3054.9	2948.4	2906.3	2996.1	2810.9	2408.2	2351.7	2349.4	2380.5	2200.8
52.5°	3264.6	3125.9	3066.0	3101.5	3260.2	3206.9	2710.0	2629.0	2596.8	2600.1	2366.1
55°	3103.7	3088.2	3120.4	3231.3	3438.7	3407.7	2999.5	2899.6	2851.9	2792.0	2524.7
57.5°	2920.7	2968.4	3096.0	3307.9	3665.0	3617.3	3284.6	3171.4	3083.8	2946.2	2701.1
60°	2752.1	2800.9	3011.7	3325.6	3789.3	3819.2	3521.9	3414.3	3284.6	3103.7	2895.2
62.5°	2495.9	2533.6	2829.8	3300.1	3734.9	3936.8	3687.2	3606.2	3485.3	3253.5	3118.2
65°	2207.5	2231.9	2524.7	3096.0	3628.4	3923.5	3823.7	3778.2	3660.6	3409.9	3338.9
67.5°	1891.3	1920.2	2164.2	2728.8	3419.9	3861.4	3952.3	3947.9	3813.7	3583.0	3498.6
70°	1527.5	1529.7	1731.6	2262.9	3056.0	3737.1	4112.1	4122.1	3960.1	3712.7	3505.3
72.5°	731.0	790.9	1122.6	1579.6	2483.7	3493.1	4216.3	4266.3	4052.2	3708.3	3127.0
75°	167.5	173.0	327.2	751.0	1456.5	2681.1	3955.7	4048.8	3828.1	3206.9	2203.0
77.5°	61.0	64.3	92.1	219.6	560.2	1385.5	2830.9	2967.3	2829.8	2073.2	1041.6
80°	41.0	39.9	47.7	97.6	257.4	392.7	1447.6	1528.6	1395.5	707.7	249.6
82.5°	21.1	22.2	33.3	54.4	173.0	136.4	483.6	525.8	432.6	142.0	46.6
85°	10.0	10.0	18.9	34.4	73.2	47.7	107.6	129.8	116.5	62.1	15.5
87.5°	10.0	10.0	17.7	22.2	37.7	20.0	26.6	33.3	31.1	33.3	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°	744.3	744.3	744.3	744.3	744.3	744.3	744.3	744.3	744.3	744.3	744.3
2.5°	738.8	737.7	736.6	738.8	737.7	739.9	739.9	742.1	742.1	739.9	738.8
5°	728.8	726.6	724.4	724.4	723.2	725.5	732.1	737.7	738.8	735.4	734.3
7.5°	729.9	729.9	727.7	723.2	715.5	715.5	715.5	722.1	725.5	723.2	722.1
10°	749.9	751.0	745.4	735.4	722.1	709.9	686.6	652.3	620.1	611.2	607.9
12.5°	784.3	785.4	774.3	756.5	728.8	656.7	567.9	485.9	422.6	404.9	401.6
15°	825.3	826.4	806.4	777.6	693.3	525.8	393.8	300.6	245.1	231.8	230.7
17.5°	867.5	865.2	835.3	779.8	587.9	372.7	239.6	191.9	177.5	174.2	175.3
20°	908.5	901.8	860.8	738.8	452.6	244.0	175.3	164.2	160.8	158.6	158.6
22.5°	946.2	932.9	881.9	657.8	317.3	175.3	156.4	154.2	149.8	146.4	145.3
25°	983.9	965.1	895.2	552.4	213.0	153.1	147.5	143.1	137.5	133.1	132.0
27.5°	1029.4	1002.8	888.5	419.3	159.7	142.0	137.5	130.9	123.1	116.5	114.3
30°	1072.7	1042.7	850.8	289.5	136.4	130.9	124.2	114.3	104.3	96.5	94.3
32.5°	1127.0	1092.6	783.1	189.7	118.7	114.3	107.6	95.4	82.1	73.2	71.0
35°	1204.7	1165.8	696.6	133.1	104.3	96.5	87.6	74.3	59.9	53.2	52.1
37.5°	1313.4	1261.2	587.9	107.6	92.1	81.0	67.7	54.4	44.4	38.8	37.7
40°	1446.5	1366.6	467.0	95.4	82.1	67.7	51.0	38.8	32.2	27.7	27.7
42.5°	1590.7	1465.3	343.9	87.6	72.1	55.5	37.7	27.7	23.3	21.1	20.0
45°	1739.3	1553.0	231.8	81.0	63.2	42.2	26.6	18.9	15.5	15.5	14.4
47.5°	1893.5	1611.8	149.8	73.2	53.2	31.1	17.7	13.3	11.1	11.1	11.1
50°	2046.6	1642.8	106.5	66.6	43.3	21.1	13.3	10.0	8.9	8.9	8.9
52.5°	2157.5	1622.9	85.4	57.7	33.3	15.5	10.0	7.8	6.7	6.7	6.7
55°	2254.0	1588.5	74.3	49.9	24.4	11.1	7.8	6.7	5.5	5.5	5.5
57.5°	2352.8	1544.1	66.6	42.2	17.7	7.8	5.5	4.4	4.4	4.4	4.4
60°	2442.6	1468.7	57.7	33.3	12.2	5.5	4.4	3.3	3.3	3.3	3.3
62.5°	2530.3	1404.3	49.9	25.5	8.9	4.4	2.2	2.2	1.1	1.1	1.1
65°	2580.2	1317.8	39.9	16.6	5.5	3.3	1.1	1.1	0.0	0.0	0.0
67.5°	2564.6	1214.7	27.7	10.0	3.3	2.2	1.1	0.0	0.0	0.0	0.0
70°	2457.0	1076.0	16.6	5.5	3.3	2.2	1.1	0.0	0.0	0.0	0.0
72.5°	2057.7	796.5	10.0	4.4	2.2	1.1	0.0	0.0	0.0	0.0	0.0
75°	1374.4	366.1	5.5	3.3	1.1	1.1	0.0	0.0	0.0	0.0	0.0
77.5°	629.0	109.8	3.3	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	126.5	28.8	2.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	26.6	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)