

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: P573198

Luminaire Tested: **ARCH-S-PA2-40-830-U-T3**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573198
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-38)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-40-830-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 3000K, 420mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5324 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G1

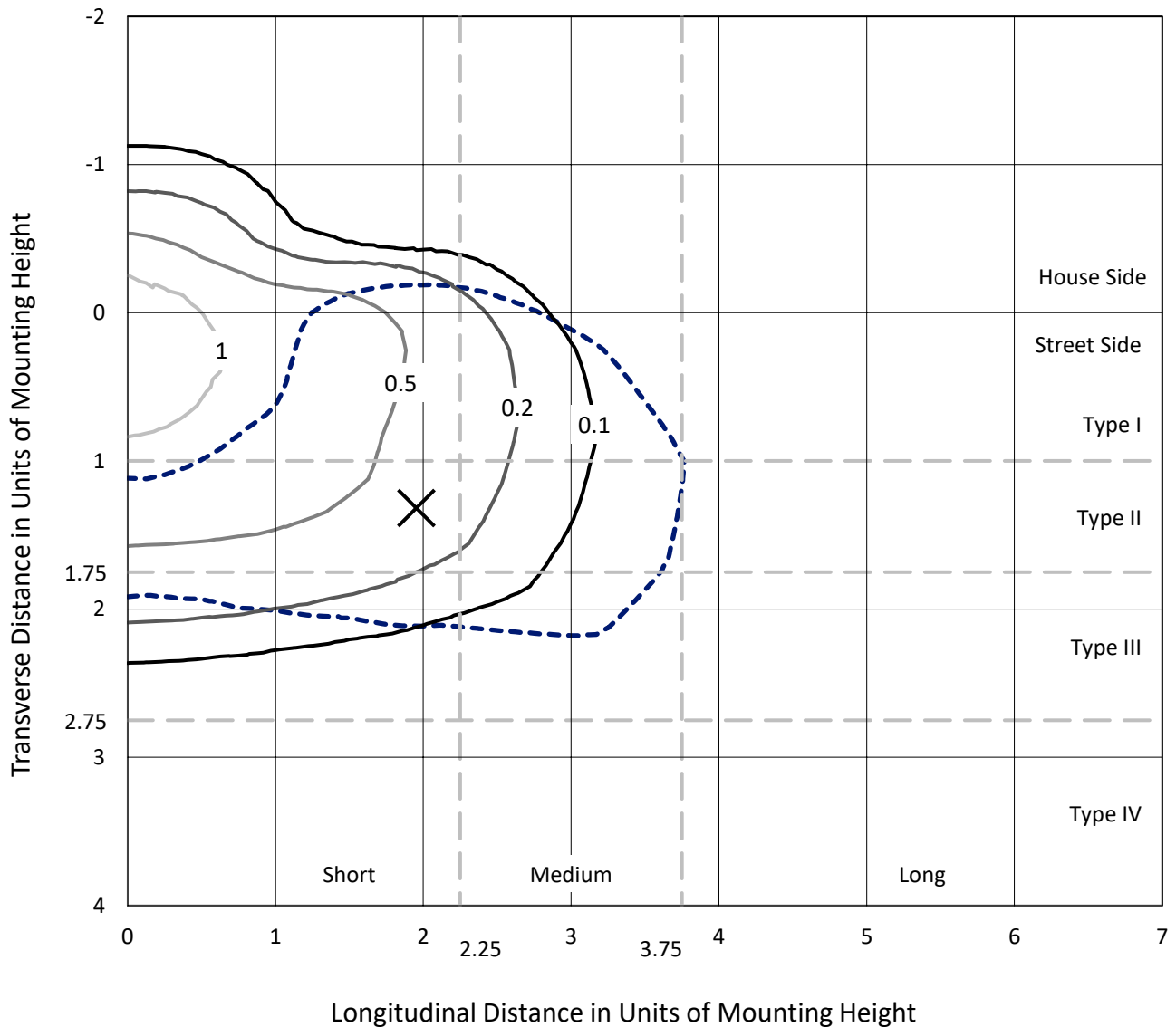
Input Watts (W): 43.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

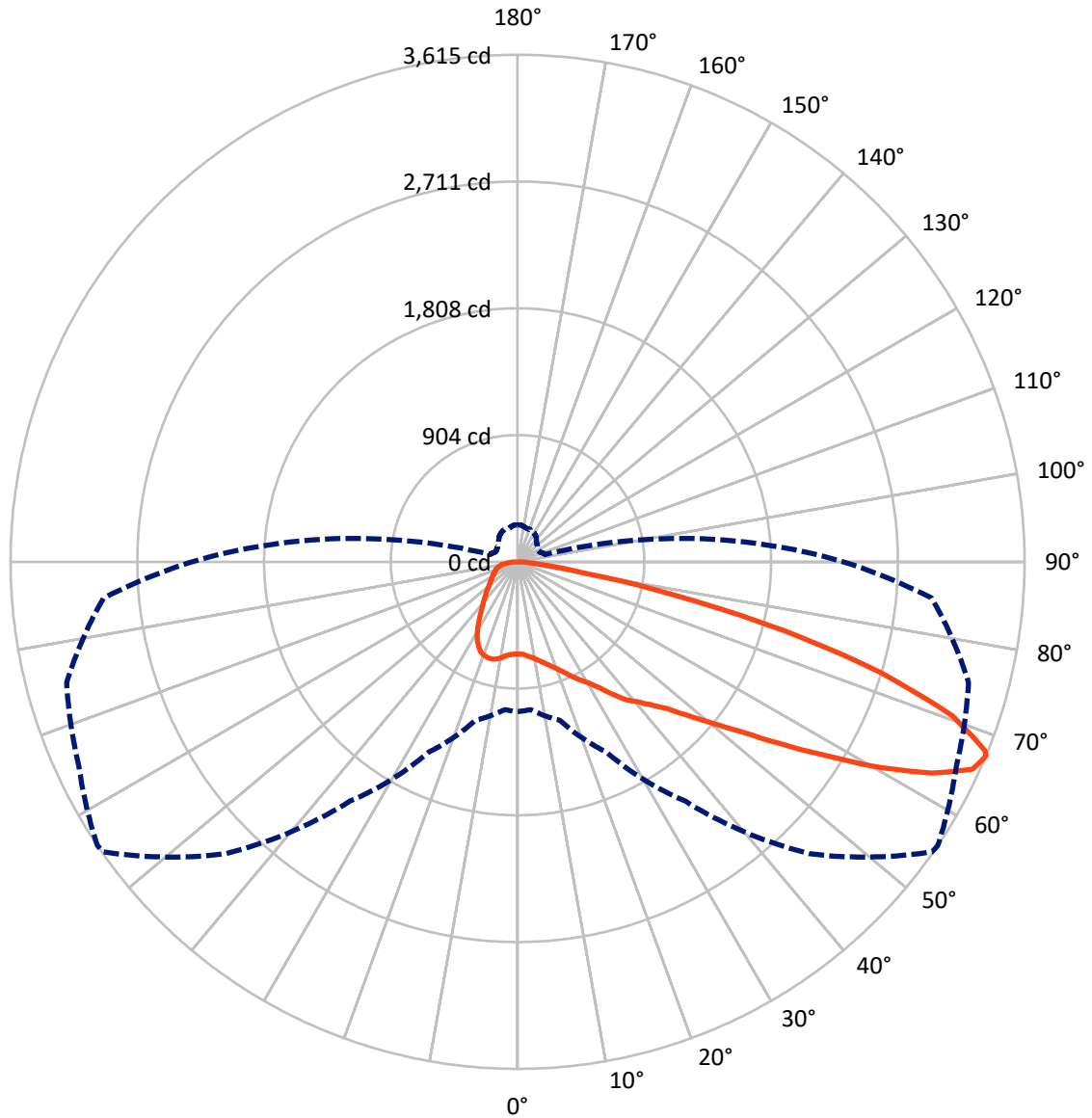
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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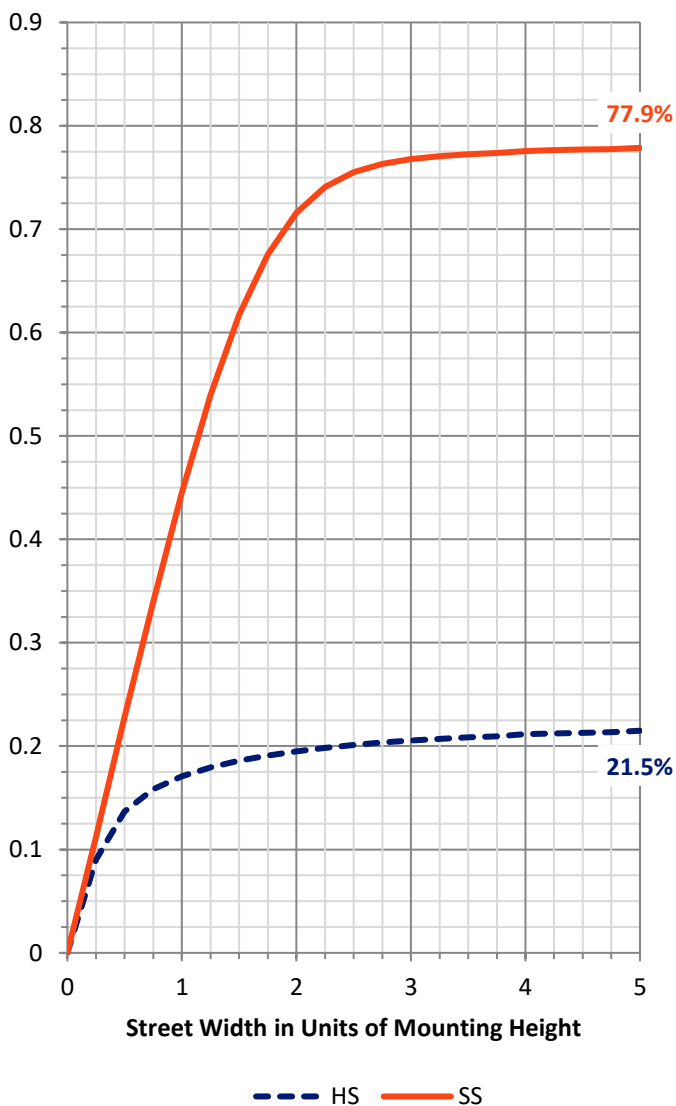
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1164.8	0.0	1164.8
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	4159.2	0.0	4159.2
	% Fixture	78.1	0.0	78.1
Total	Lumens	5324.0	0.0	5324.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.7	1.2
10°-20°	207.4	3.9
20°-30°	360.9	6.8
30°-40°	529.2	9.9
40°-50°	774.3	14.5
50°-60°	1210.1	22.7
60°-70°	1438.3	27.0
70°-80°	655.1	12.3
80°-90°	84.0	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°	5324.0	100.0
0°-180°	5324.0	100.0

Coefficient of Utilization



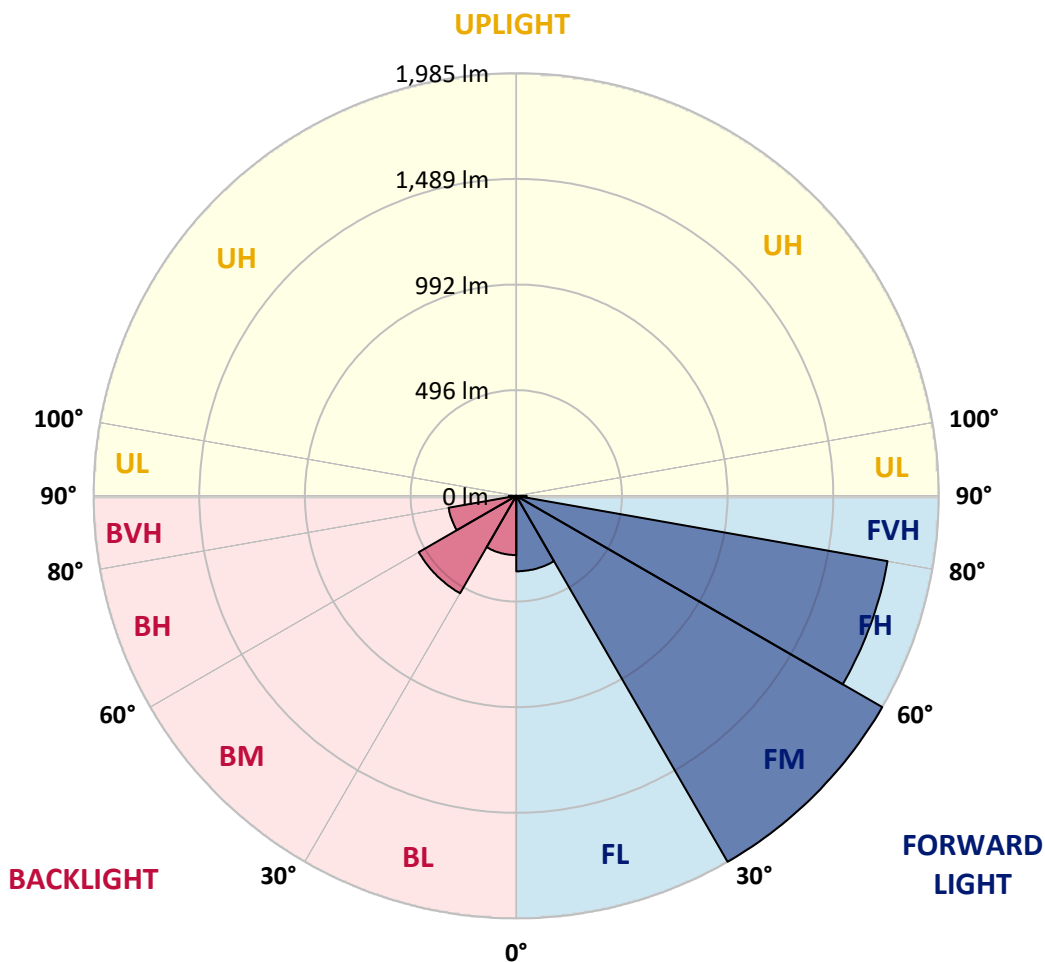
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	354.6	6.7			
FM (30°-60°)	1984.9	37.3			
FH (60°-80°)	1770.7	33.3			G1/1800
FVH (80°-90°)	49.0	0.9			G1/100
BL (0°-30°)	278.4	5.2	B1/500		
BM (30°-60°)	528.7	9.9	B1/1000		
BH (60°-80°)	322.7	6.1	B1/500		G1/500
BVH (80°-90°)	35.0	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3
2.5°	667.4	664.5	663.1	664.5	663.1	660.2	661.6	660.2	658.7	657.3	657.3
5°	676.0	673.2	671.7	673.2	674.6	671.7	671.7	671.7	667.4	666.0	663.1
7.5°	681.8	677.5	677.5	680.4	683.3	684.7	687.6	686.1	681.8	678.9	673.2
10°	700.5	694.8	694.8	694.8	697.7	700.5	703.4	704.9	703.4	702.0	697.7
12.5°	729.4	723.6	723.6	723.6	723.6	722.2	726.5	727.9	730.8	730.8	723.6
15°	768.3	761.1	758.2	752.4	751.0	748.1	753.9	753.9	758.2	759.6	752.4
17.5°	805.8	797.1	794.2	788.5	782.7	775.5	781.3	782.7	791.4	792.8	781.3
20°	844.7	841.8	837.5	828.8	818.7	811.5	817.3	815.9	823.1	826.0	811.5
22.5°	895.1	887.9	885.1	873.5	862.0	854.8	854.8	857.7	864.9	864.9	843.3
25°	955.7	945.6	938.4	925.4	911.0	902.4	903.8	906.7	916.8	909.6	876.4
27.5°	1030.6	1020.6	1010.5	984.5	970.1	952.8	951.4	954.2	970.1	951.4	908.1
30°	1101.3	1097.0	1088.3	1068.1	1045.1	1016.2	1003.3	1004.7	1016.2	990.3	935.5
32.5°	1161.8	1156.1	1151.7	1137.3	1121.5	1086.9	1069.6	1071.0	1069.6	1037.9	968.7
35°	1233.9	1225.2	1222.4	1209.4	1189.2	1166.1	1158.9	1156.1	1147.4	1104.2	1011.9
37.5°	1303.1	1294.4	1290.1	1282.9	1267.0	1246.9	1246.9	1245.4	1228.1	1167.6	1055.1
40°	1385.2	1375.2	1362.2	1357.9	1344.9	1330.5	1318.9	1311.7	1281.5	1226.7	1138.8
42.5°	1484.7	1478.9	1471.7	1453.0	1432.8	1429.9	1396.8	1393.9	1372.3	1340.6	1257.0
45°	1627.4	1615.9	1605.8	1600.0	1575.5	1549.6	1503.4	1491.9	1491.9	1484.7	1395.3
47.5°	1771.6	1751.4	1765.8	1761.5	1755.7	1726.9	1637.5	1638.9	1636.1	1654.8	1598.6
50°	1868.1	1856.6	1897.0	1915.7	1956.1	1956.1	1827.8	1811.9	1823.4	1878.2	1806.1
52.5°	1943.1	1935.9	1982.0	2055.5	2175.2	2186.7	2054.1	2020.9	2036.8	2114.6	2085.8
55°	2003.6	1996.4	2049.8	2178.0	2369.8	2440.4	2315.0	2300.6	2268.9	2352.5	2361.1
57.5°	2039.7	2023.8	2104.5	2276.1	2528.3	2691.2	2620.6	2616.2	2542.7	2620.6	2659.5
60°	1984.9	1974.8	2085.8	2316.4	2656.6	2927.6	2979.5	2979.5	2848.3	2890.1	2937.7
62.5°	1807.6	1794.6	1911.4	2222.7	2672.5	3120.8	3335.5	3318.2	3142.4	3140.9	3099.1
65°	1470.3	1454.4	1585.6	1914.3	2472.1	3143.8	3576.3	3566.2	3362.9	3305.3	3109.2
67°	1068.1	1058.0	1170.5	1496.2	2082.9	2943.5	3606.5	3615.2	3450.9	3328.3	2963.6
67.5°	958.6	957.1	1050.8	1373.7	1969.0	2869.9	3586.4	3595.0	3449.4	3309.6	2906.0
70°	446.9	467.0	555.0	787.0	1327.6	2260.2	3254.8	3288.0	3264.9	3093.4	2447.6
72.5°	207.6	216.2	255.1	380.5	713.5	1457.3	2637.9	2717.2	2818.1	2653.7	1938.8
75°	128.3	131.2	152.8	197.5	335.9	700.5	1878.2	1964.7	2117.5	1996.4	1239.7
77.5°	100.9	102.3	116.8	141.3	196.0	301.3	1030.6	1138.8	1337.7	1180.6	624.2
80°	75.0	77.8	89.4	109.6	138.4	154.2	438.2	478.6	645.8	494.4	259.5
82.5°	54.8	57.7	69.2	79.3	96.6	98.0	178.7	188.8	276.8	200.4	112.4
85°	46.1	46.1	53.3	59.1	64.9	54.8	87.9	86.5	106.7	90.8	44.7
87.5°	21.6	23.1	50.5	37.5	31.7	23.1	25.9	27.4	33.2	36.0	17.3
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°	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3	657.3
2.5°	655.9	655.9	655.9	657.3	658.7	658.7	660.2	660.2	661.6	663.1	666.0
5°	661.6	661.6	660.2	661.6	664.5	666.0	668.8	671.7	674.6	677.5	678.9
7.5°	673.2	671.7	671.7	671.7	674.6	677.5	681.8	684.7	689.0	690.5	693.3
10°	694.8	691.9	691.9	693.3	694.8	690.5	689.0	687.6	691.9	694.8	697.7
12.5°	720.7	717.8	716.4	712.1	706.3	697.7	690.5	684.7	686.1	689.0	693.3
15°	748.1	742.4	739.5	729.4	715.0	696.2	684.7	677.5	677.5	677.5	681.8
17.5°	776.9	771.2	759.6	740.9	713.5	687.6	673.2	660.2	654.4	653.0	655.9
20°	804.3	795.7	776.9	748.1	704.9	670.3	651.5	629.9	621.3	615.5	618.4
22.5°	830.3	818.7	792.8	748.1	690.5	644.3	611.2	582.3	567.9	565.1	566.5
25°	857.7	843.3	808.7	739.5	658.7	605.4	559.3	529.0	510.3	507.4	511.7
27.5°	885.1	863.4	821.6	716.4	622.7	552.1	503.1	474.2	464.1	458.4	459.8
30°	908.1	887.9	834.6	684.7	573.7	490.1	445.4	432.4	425.2	422.3	422.3
32.5°	938.4	919.7	843.3	647.2	516.0	433.9	405.1	395.0	389.2	382.0	383.4
35°	975.9	958.6	838.9	599.6	461.3	396.4	373.3	358.9	346.0	335.9	334.4
37.5°	1026.3	1013.3	817.3	542.0	410.8	369.0	346.0	327.2	308.5	292.6	289.7
40°	1109.9	1079.7	785.6	478.6	376.2	347.4	320.0	296.9	273.9	256.6	252.3
42.5°	1216.6	1153.2	742.4	413.7	347.4	324.3	296.9	266.7	245.0	229.2	229.2
45°	1340.6	1232.4	690.5	364.7	317.1	301.3	268.1	242.2	229.2	219.1	217.7
47.5°	1487.6	1311.7	624.2	325.8	292.6	281.1	247.9	232.1	223.4	214.8	213.3
50°	1685.1	1418.4	575.1	292.6	268.1	258.0	242.2	229.2	220.5	214.8	213.3
52.5°	1911.4	1555.3	540.5	266.7	247.9	243.6	240.7	230.6	222.0	217.7	216.2
55°	2156.4	1724.0	507.4	245.0	232.1	237.8	243.6	233.5	227.8	222.0	219.1
57.5°	2387.1	1866.7	454.1	226.3	220.5	230.6	242.2	235.0	227.8	223.4	222.0
60°	2544.2	1938.8	380.5	209.0	209.0	220.5	237.8	227.8	220.5	222.0	222.0
62.5°	2594.6	1911.4	301.3	193.2	197.5	209.0	224.9	219.1	216.2	223.4	223.4
65°	2519.7	1800.4	240.7	180.2	185.9	194.6	217.7	223.4	232.1	247.9	249.4
67°	2323.6	1621.6	203.2	170.1	175.9	190.3	226.3	246.5	246.5	263.8	263.8
67.5°	2266.0	1561.1	197.5	167.2	174.4	190.3	230.6	252.3	246.5	266.7	266.7
70°	1842.2	1228.1	167.2	158.6	168.7	200.4	249.4	253.7	240.7	259.5	258.0
72.5°	1366.5	887.9	152.8	149.9	157.1	188.8	247.9	243.6	224.9	230.6	226.3
75°	844.7	514.6	141.3	138.4	142.7	167.2	229.2	222.0	200.4	196.0	191.7
77.5°	407.9	260.9	121.1	125.4	129.7	145.6	201.8	194.6	175.9	165.8	164.3
80°	177.3	134.1	103.8	111.0	112.4	124.0	167.2	158.6	141.3	125.4	125.4
82.5°	87.9	75.0	82.2	92.3	89.4	99.5	131.2	116.8	103.8	86.5	83.6
85°	40.4	43.2	60.5	69.2	60.5	62.0	89.4	82.2	64.9	49.0	50.5
87.5°	14.4	20.2	34.6	41.8	30.3	28.8	47.6	34.6	20.2	5.8	7.2
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)