

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: P348957

Luminaire Tested: **ARCH-N-PA1-40-827-U-T2U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348957
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1908-474-1)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-40-827-U-T2U
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 740mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4071 lumens
Efficiency: N/A
Efficacy: 99.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

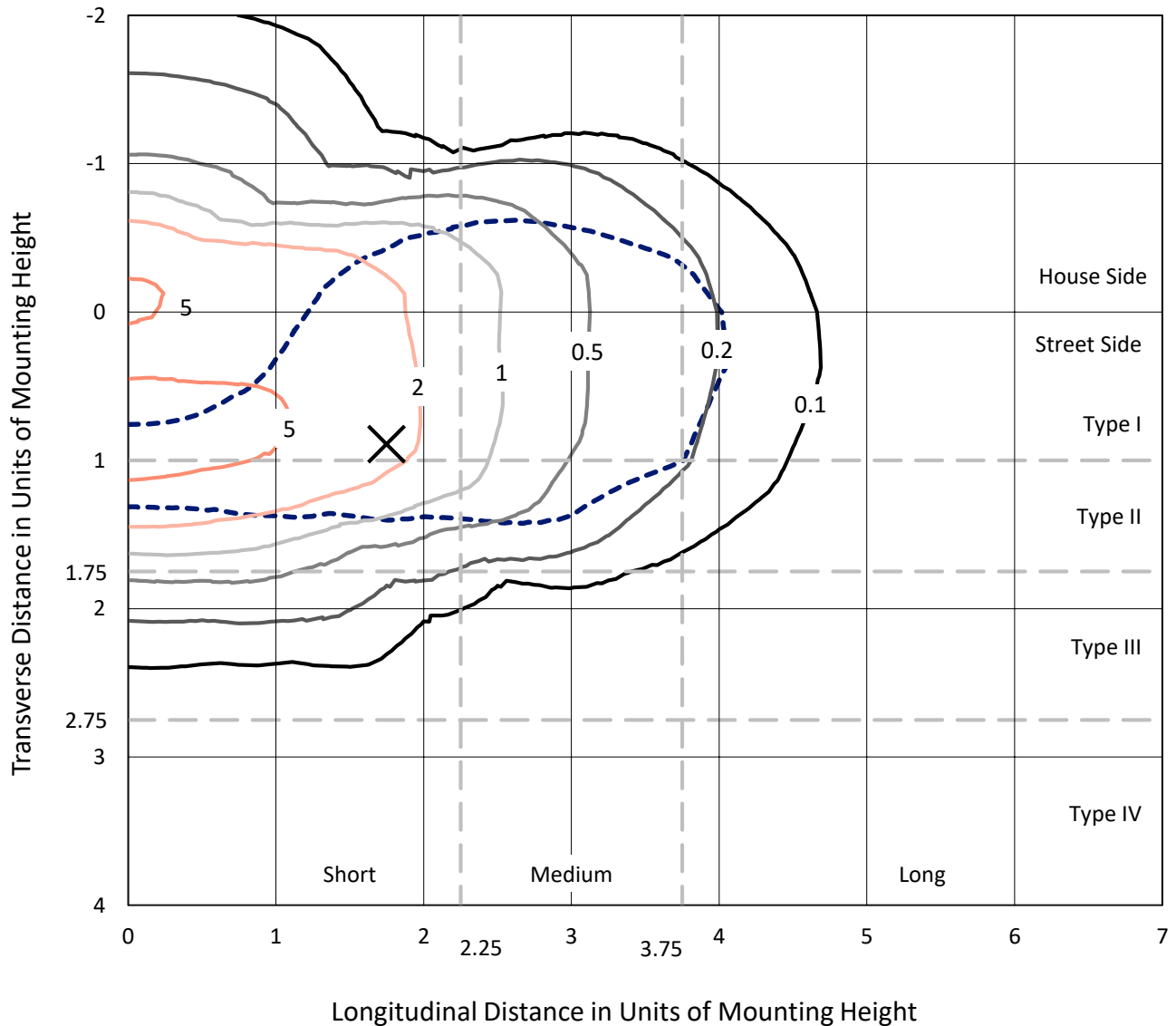
Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

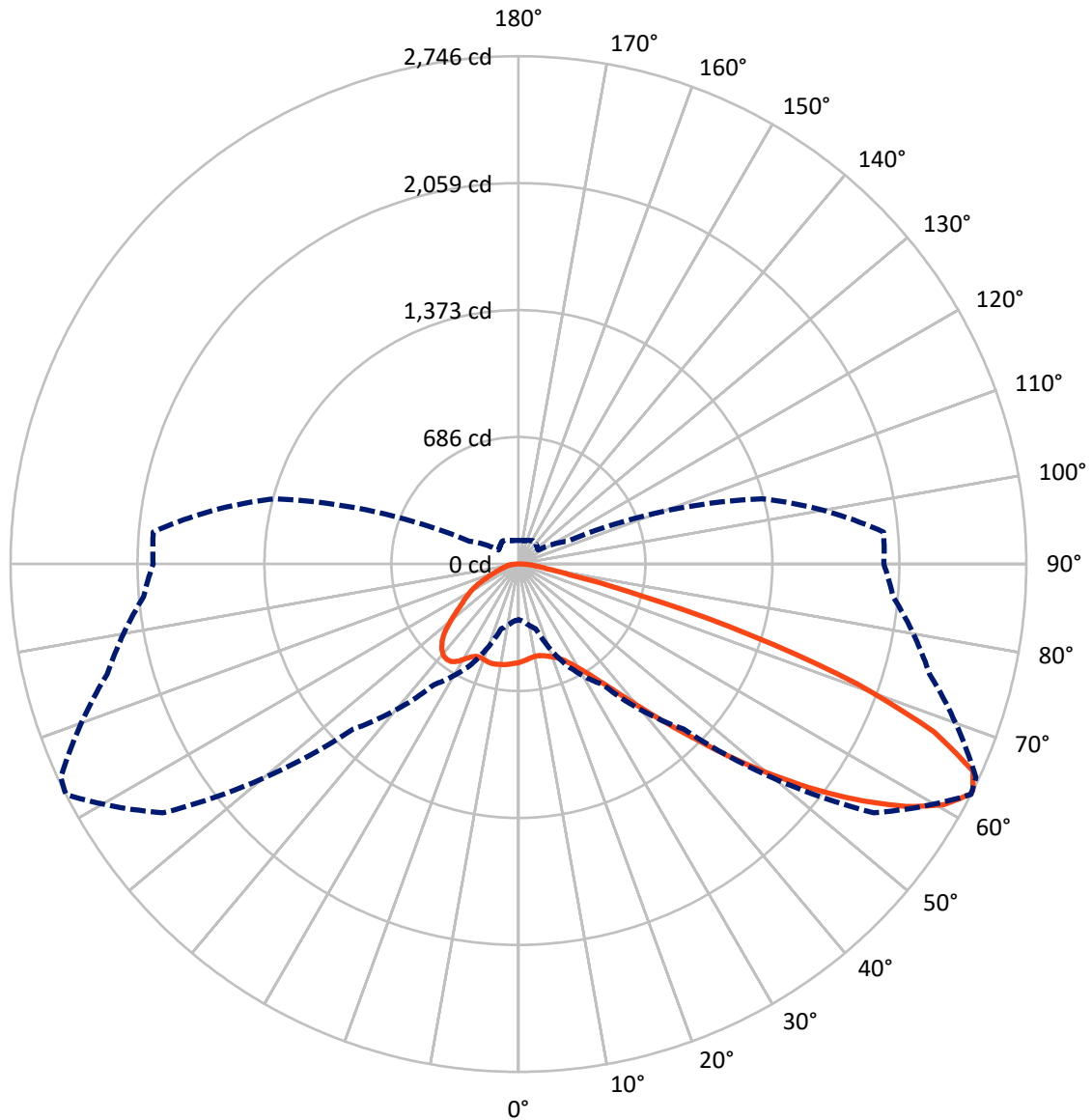
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.1 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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



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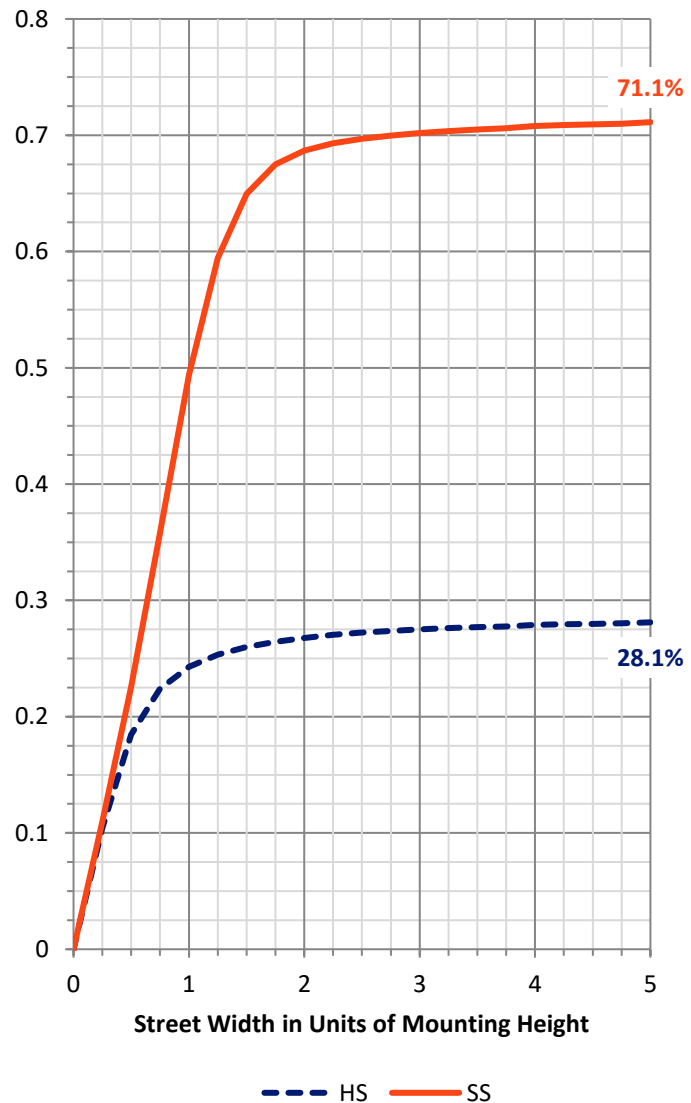
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1162.2	0.0	1162.2
	% Fixture	28.5	0.0	28.5
Street Side	Lumens	2908.8	0.0	2908.8
	% Fixture	71.5	0.0	71.5
Total	Lumens	4071.0	0.0	4071.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.6	1.2
10°-20°	149.2	3.7
20°-30°	262.1	6.4
30°-40°	441.7	10.9
40°-50°	773.8	19.0
50°-60°	1000.1	24.6
60°-70°	865.7	21.3
70°-80°	449.4	11.0
80°-90°	78.3	1.9
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°	4071.0	100.0
0°-180°	4071.0	100.0



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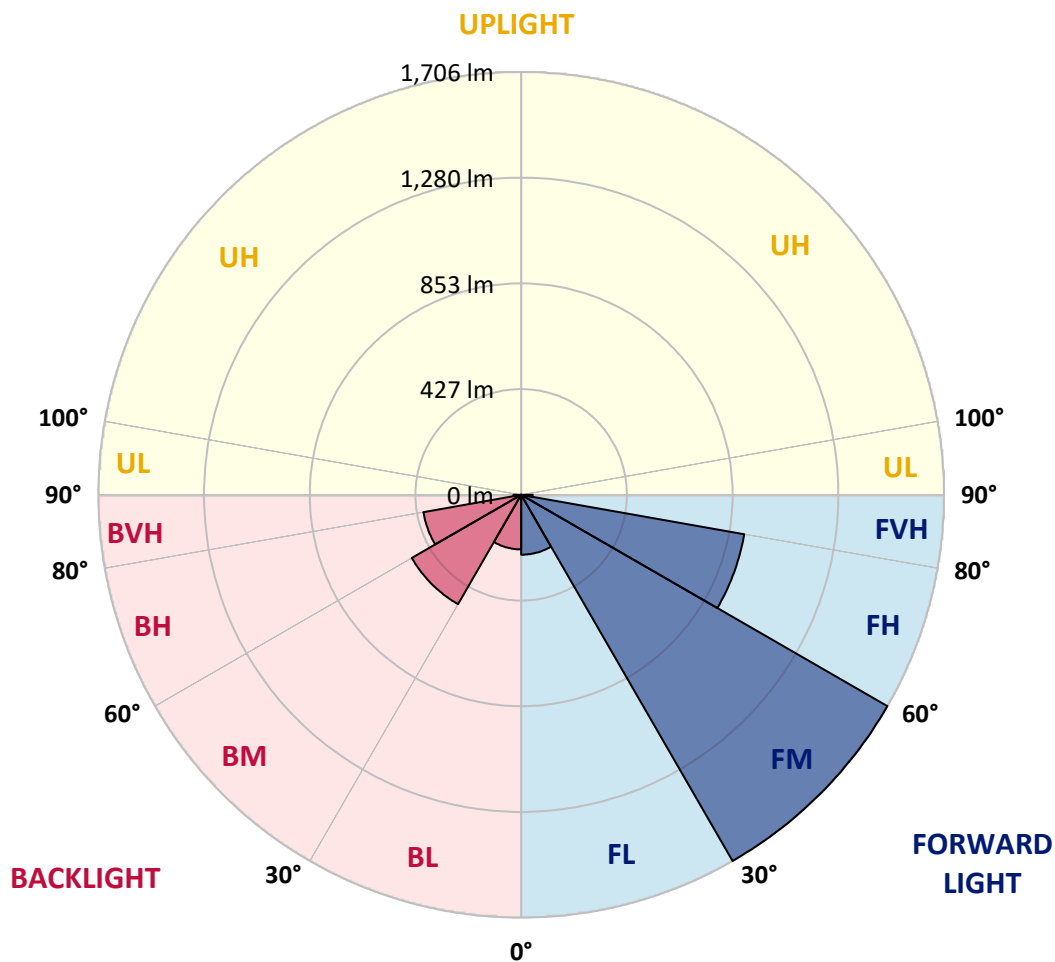
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	241.7	5.9			
FM	(30°-60°)	1706.2	41.9			
FH	(60°-80°)	914.2	22.5			G1/1800
FVH	(80°-90°)	46.6	1.1			G1/100
BL	(0°-30°)	220.2	5.4	B1/500		
BM	(30°-60°)	509.5	12.5	B1/1000		
BH	(60°-80°)	400.9	9.8	B1/500		G1/500
BVH	(80°-90°)	31.7	0.8			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	520.4	518.9	521.6	522.7	522.3	524.6	524.6	525.0	525.0	526.9	528.8
5°	505.2	504.4	507.1	509.0	510.5	514.0	516.2	517.4	518.5	521.2	525.8
7.5°	490.7	489.6	493.4	494.9	497.2	502.2	507.5	510.5	512.1	517.8	524.3
10°	478.9	478.5	481.6	483.1	485.8	493.0	500.6	507.1	508.2	515.9	522.0
12.5°	473.2	472.4	475.9	477.8	482.3	491.1	499.9	507.9	509.8	518.5	523.9
15°	477.8	478.5	481.6	482.0	487.3	496.4	506.3	514.3	516.2	525.0	528.8
17.5°	499.5	499.1	501.0	500.2	502.2	506.7	517.4	523.9	526.2	532.6	535.7
20°	538.7	537.6	539.1	534.2	525.8	523.5	530.0	537.2	538.0	541.8	539.9
22.5°	598.5	599.7	596.3	583.7	563.5	554.0	549.8	552.1	554.7	554.3	548.6
25°	676.6	680.5	674.0	651.9	618.0	595.9	580.6	577.2	579.1	573.8	565.0
27.5°	779.1	782.2	768.1	733.8	688.1	655.3	624.8	613.0	613.0	601.6	585.6
30°	891.9	893.8	871.3	827.9	774.9	726.2	681.2	658.4	656.5	634.0	608.8
32.5°	1029.1	1023.7	997.1	943.3	876.7	809.6	751.7	717.0	713.2	679.3	647.3
35°	1206.2	1206.2	1151.0	1089.6	1008.5	923.2	847.0	793.2	789.4	750.9	709.4
37.5°	1398.6	1397.9	1348.0	1263.4	1166.2	1061.8	960.1	893.1	884.3	843.1	796.7
40°	1590.3	1583.8	1543.4	1463.0	1359.4	1240.1	1099.9	1021.8	1017.6	959.0	900.7
42.5°	1730.5	1724.4	1705.3	1651.6	1583.4	1497.3	1281.7	1176.1	1170.0	1096.1	1024.9
45°	1807.8	1799.1	1796.4	1797.2	1804.8	1804.4	1506.1	1358.6	1337.3	1251.6	1156.7
47.5°	1790.3	1769.7	1797.2	1867.6	1986.1	2063.9	1767.4	1575.4	1535.8	1413.1	1297.3
50°	1648.9	1639.0	1697.7	1841.4	2084.8	2267.3	2055.1	1800.6	1744.6	1565.9	1430.3
52.5°	1400.9	1420.0	1492.4	1696.6	2066.9	2390.4	2316.5	2034.5	1956.8	1711.4	1545.7
55°	1115.2	1139.2	1241.3	1457.7	1901.2	2391.9	2505.0	2261.2	2191.9	1861.9	1663.8
57.5°	811.5	845.4	973.1	1171.6	1610.5	2228.4	2598.0	2473.4	2394.2	2010.1	1779.2
60°	509.8	533.8	672.8	903.0	1231.0	1867.6	2574.8	2643.3	2577.8	2150.0	1911.1
62.5°	328.4	339.8	400.0	644.6	858.4	1369.7	2402.9	2740.9	2712.7	2277.6	2010.5
63°	301.0	310.9	362.3	595.9	795.9	1261.9	2345.0	2745.8	2729.1	2301.6	2033.8
65°	215.3	225.9	252.6	409.6	587.5	846.6	2009.4	2699.7	2718.4	2341.6	2065.4
67.5°	169.9	173.4	185.5	248.8	416.8	480.8	1352.2	2424.3	2506.2	2298.9	2018.5
70°	152.0	154.7	168.4	190.9	315.5	311.7	705.2	1949.2	2118.7	2153.4	1900.4
72.5°	132.6	134.5	151.3	179.8	240.8	238.1	306.7	1310.6	1516.7	1886.7	1737.0
75°	109.7	111.6	125.7	159.6	203.8	188.2	192.0	685.0	869.4	1479.0	1523.2
77.5°	90.3	91.4	103.2	128.4	179.4	145.2	148.6	288.0	422.5	1008.1	1202.8
80°	65.5	65.9	77.0	97.5	137.2	131.1	110.5	157.0	191.6	552.4	756.7
82.5°	45.7	46.1	57.5	68.2	94.5	130.7	80.4	105.2	115.1	254.5	336.8
85°	32.0	31.2	39.2	45.0	59.8	79.2	61.3	67.4	71.2	110.1	90.7
87.5°	14.1	13.7	22.1	24.0	30.1	36.6	48.8	35.4	37.7	53.3	28.6
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°	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0	533.0
2.5°	529.2	530.7	533.0	536.4	539.1	540.3	542.5	542.9	546.3	543.3	543.7
5°	528.4	530.3	535.3	541.4	545.6	548.6	554.3	556.3	559.7	558.2	557.8
7.5°	527.3	530.7	538.0	546.7	553.2	558.2	563.5	566.9	570.4	569.6	568.8
10°	525.8	530.0	540.3	549.0	558.2	563.5	567.3	567.7	568.8	568.1	566.2
12.5°	526.9	531.5	543.3	552.1	561.6	565.4	564.3	558.5	553.6	549.4	548.6
15°	530.7	536.1	547.1	555.1	562.7	560.4	553.6	541.0	531.9	526.5	526.9
17.5°	534.5	539.1	547.5	554.0	557.8	550.9	540.3	529.6	525.4	521.2	520.4
20°	538.0	538.7	544.1	549.8	549.4	544.1	534.2	521.2	512.8	506.0	506.3
22.5°	543.3	540.3	540.6	544.1	548.3	543.3	520.1	497.6	485.0	477.0	476.6
25°	555.5	549.0	542.9	544.8	560.8	529.2	490.0	460.6	449.6	442.3	443.1
27.5°	572.3	563.5	551.3	561.6	570.4	501.4	446.9	416.8	409.2	401.6	403.5
30°	590.5	578.0	563.1	597.8	559.7	457.2	393.6	366.1	359.3	352.0	353.6
32.5°	623.3	604.6	585.2	641.2	534.9	403.5	337.6	312.8	308.2	303.7	304.0
35°	677.8	655.7	634.7	674.4	502.9	347.5	287.3	269.7	265.9	260.6	260.6
37.5°	758.2	723.5	712.5	691.9	459.1	295.3	250.3	238.5	230.5	223.3	223.3
40°	851.5	810.4	801.6	697.2	402.0	251.8	224.4	214.1	203.5	192.8	193.5
42.5°	965.1	909.4	889.2	690.0	332.6	224.0	206.1	194.3	184.0	174.9	173.4
45°	1093.1	1022.6	971.5	669.0	269.7	206.9	194.3	180.2	167.3	159.3	157.7
47.5°	1223.8	1145.3	1044.3	627.1	225.5	194.7	186.3	166.5	157.4	152.0	151.3
50°	1348.7	1266.8	1104.5	561.2	200.0	185.9	174.5	160.0	152.4	147.8	147.4
52.5°	1459.6	1382.3	1155.2	493.0	182.9	178.7	169.2	157.0	149.0	144.8	144.0
55°	1565.1	1499.2	1205.5	432.0	168.0	166.5	166.5	153.9	145.2	141.3	140.6
57.5°	1681.0	1632.2	1256.1	387.5	154.7	157.7	163.1	150.5	141.0	137.5	137.2
60°	1814.7	1786.1	1309.5	348.2	142.9	148.2	158.1	145.9	136.0	133.3	132.6
62.5°	1951.5	1952.2	1355.6	301.0	133.0	141.0	152.4	141.7	131.4	129.5	129.2
63°	1975.5	1982.3	1362.1	290.7	130.7	139.4	150.9	140.2	130.3	128.4	128.0
65°	2034.5	2064.6	1367.4	247.3	122.3	133.7	145.2	135.3	125.3	125.0	124.2
67.5°	2020.4	2069.6	1334.2	193.9	112.8	125.7	137.2	128.0	119.3	119.3	117.7
70°	1915.3	1947.3	1232.5	149.7	105.5	117.3	127.6	120.4	111.3	112.0	109.0
72.5°	1754.1	1719.1	1013.8	117.0	96.8	107.8	116.6	110.5	102.5	101.7	98.3
75°	1517.9	1402.4	726.2	94.5	86.1	95.2	104.4	99.8	92.6	88.4	87.6
77.5°	1156.7	995.5	435.1	80.0	77.0	84.6	90.3	86.9	81.2	76.2	76.6
80°	688.8	574.2	196.2	67.8	66.7	72.4	77.0	74.3	70.5	64.4	62.9
82.5°	278.9	222.1	88.0	54.9	56.4	60.6	64.8	62.5	59.4	57.9	49.1
85°	72.4	69.7	51.4	41.1	43.4	45.3	51.1	51.1	48.4	39.6	36.6
87.5°	20.6	27.4	28.6	25.9	29.3	29.7	35.4	35.4	36.2	24.4	22.1
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)