

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: P348908

Luminaire Tested: **ARCH-N-PA1-40-830-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348908
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-19)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-40-830-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 740mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3122 lumens
Efficiency: N/A
Efficacy: 76.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

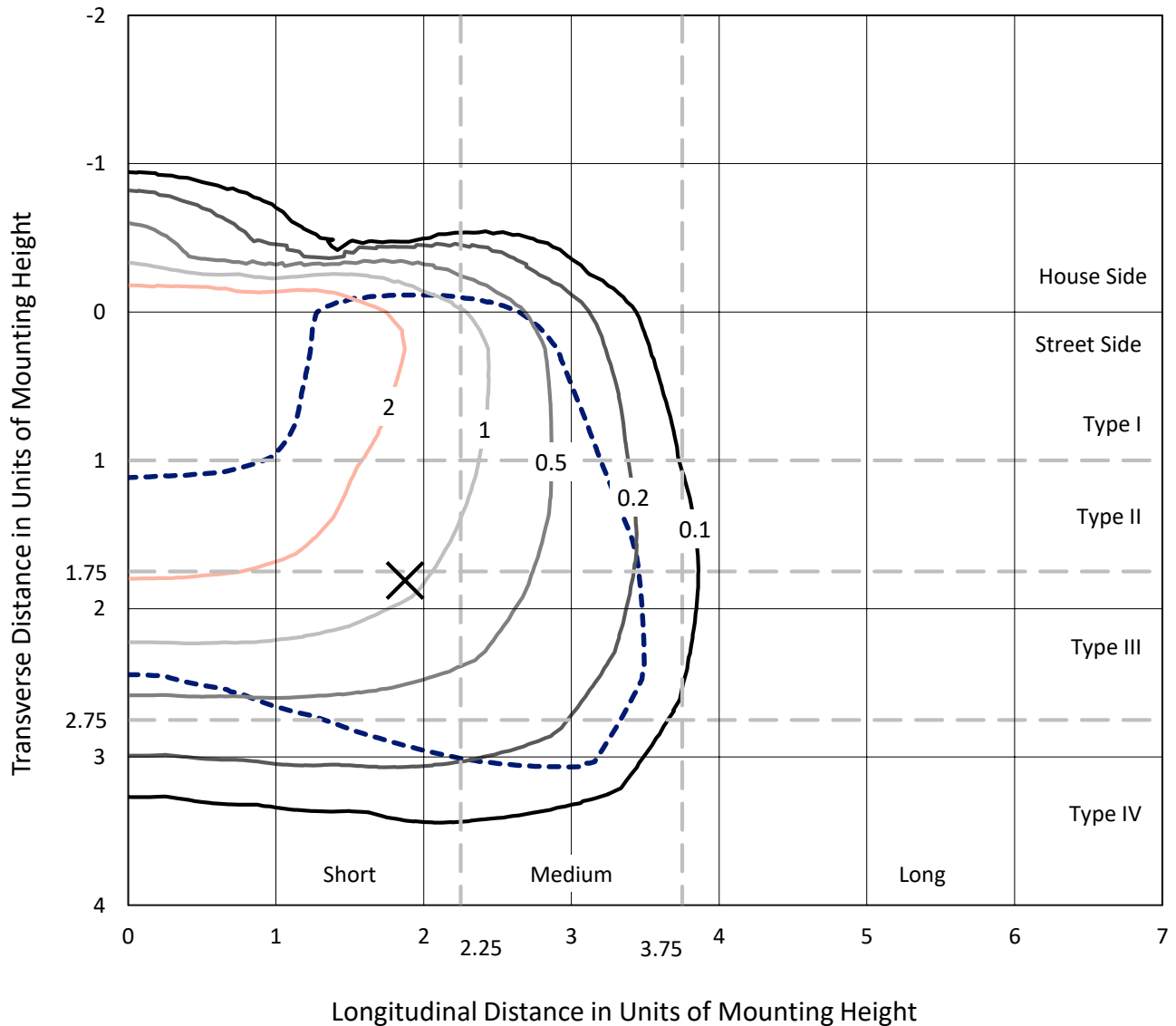
Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

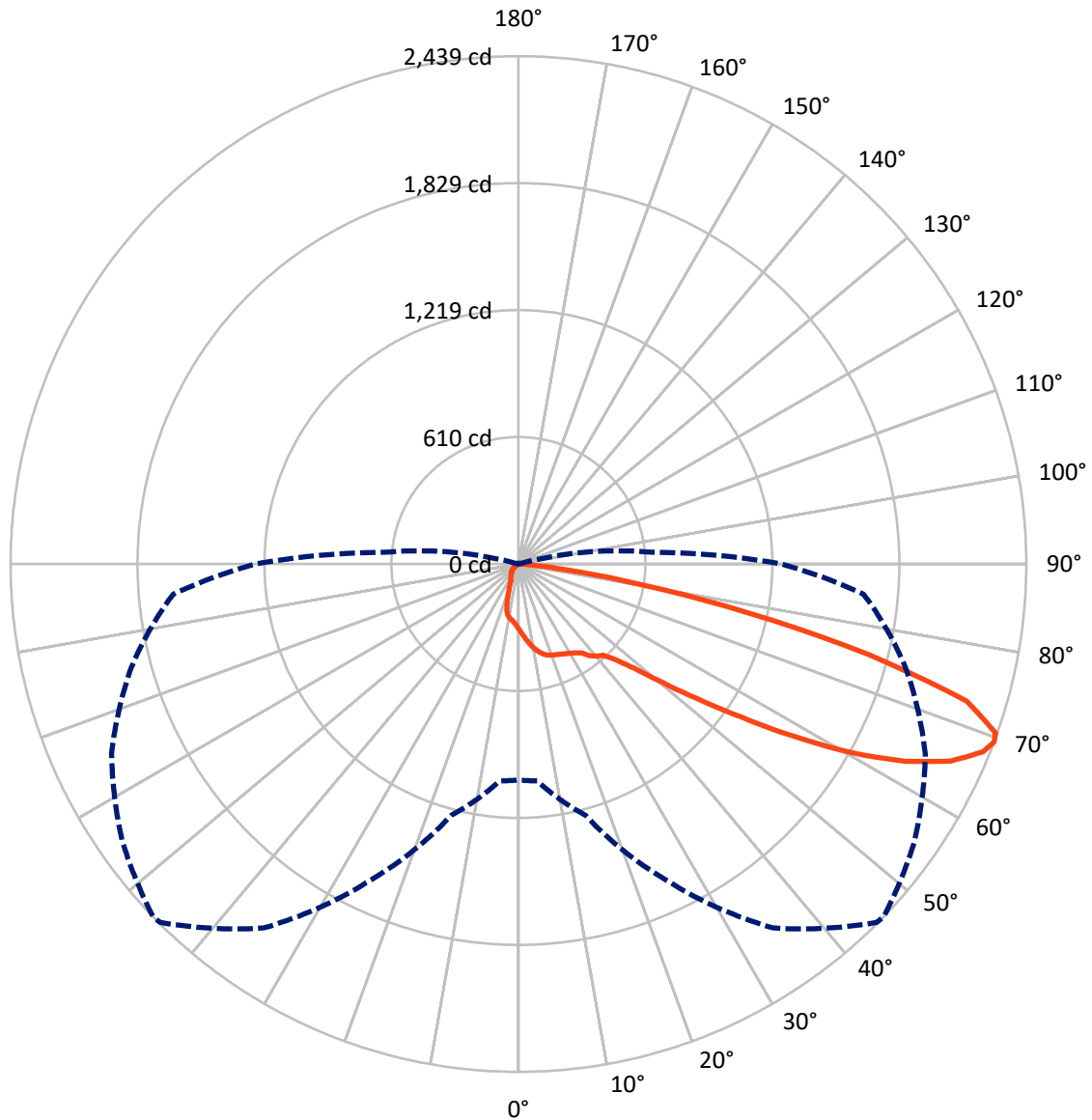
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.6 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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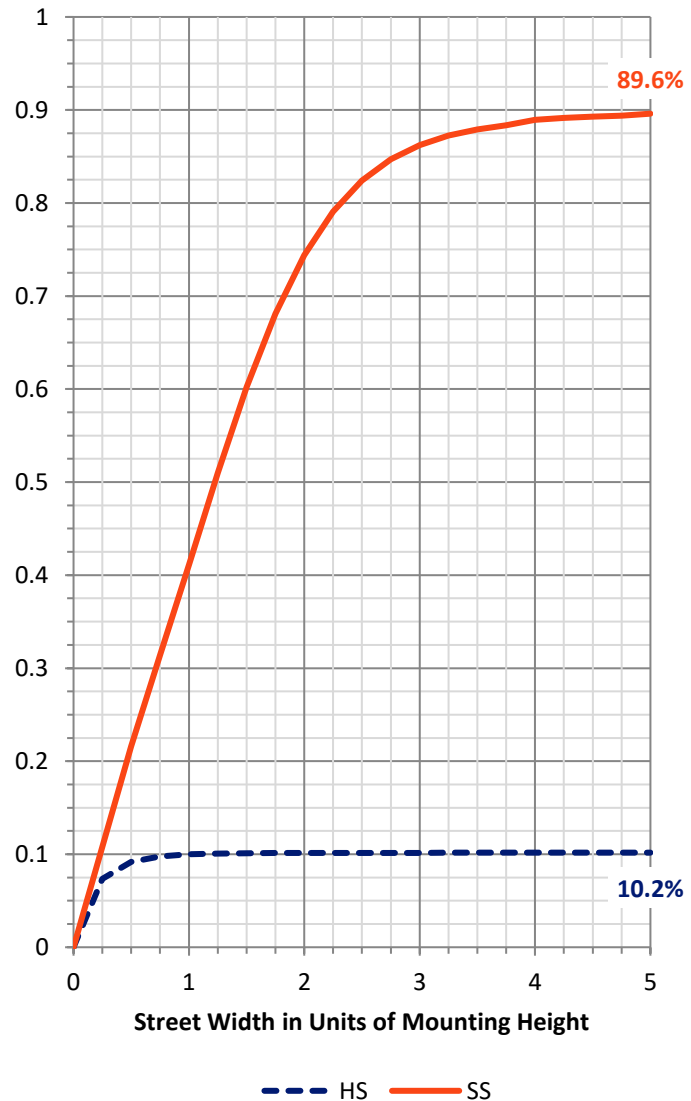
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	320.4	0.0	320.4
	% Fixture	10.3	0.0	10.3
Street Side	Lumens	2801.6	0.0	2801.6
	% Fixture	89.7	0.0	89.7
Total	Lumens	3122.0	0.0	3122.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.1	1.0
10°-20°	94.5	3.0
20°-30°	148.6	4.8
30°-40°	213.0	6.8
40°-50°	368.2	11.8
50°-60°	727.4	23.3
60°-70°	1016.6	32.6
70°-80°	491.1	15.7
80°-90°	31.6	1.0
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°	3122.0	100.0
0°-180°	3122.0	100.0



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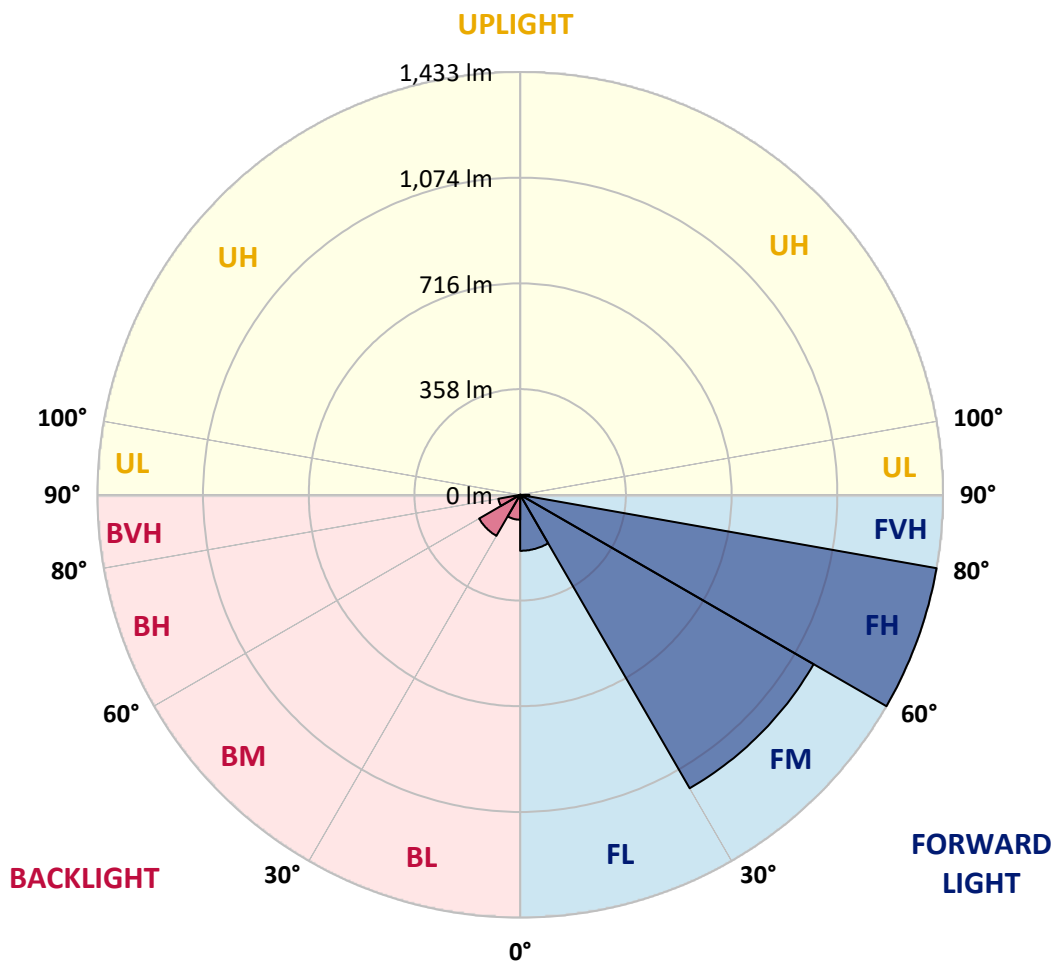
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	189.7	6.1			
FM	(30°-60°)	1148.0	36.8			
FH	(60°-80°)	1432.6	45.9			G1/1800
FVH	(80°-90°)	31.3	1.0			G1/100
BL	(0°-30°)	84.4	2.7	B0/110		
BM	(30°-60°)	160.6	5.1	B0/220		
BH	(60°-80°)	75.1	2.4	B0/110		G0/110
BVH	(80°-90°)	0.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8
2.5°	347.5	347.1	345.0	344.1	339.2	336.2	335.1	331.4	326.1	320.9	315.0
5°	387.0	386.9	383.1	379.4	370.0	361.3	359.7	351.2	339.3	328.2	317.1
7.5°	427.4	425.5	421.7	414.7	401.1	387.0	385.7	373.7	356.9	340.8	324.8
10°	461.7	460.5	455.5	444.8	428.9	412.9	411.3	396.5	377.5	357.8	337.4
12.5°	488.3	487.4	480.9	467.5	450.6	434.0	431.8	418.6	398.3	376.2	352.2
15°	504.6	504.1	496.1	481.9	465.2	450.8	448.9	437.4	418.5	395.4	368.3
17.5°	508.4	508.5	500.2	485.8	472.1	461.8	460.4	451.6	435.8	412.8	384.4
20°	499.9	501.6	494.2	481.7	473.2	467.8	466.7	461.4	448.1	426.4	397.3
22.5°	487.9	488.8	483.6	475.3	471.8	472.8	472.2	469.3	458.0	438.1	410.0
25°	480.6	480.6	477.5	470.5	472.8	479.1	479.2	478.7	469.7	452.5	425.5
27.5°	480.3	479.4	475.9	470.6	477.1	486.7	487.3	491.2	485.7	469.9	444.8
30°	492.0	491.0	483.5	476.6	484.8	495.2	496.7	505.3	502.5	488.8	466.4
32.5°	519.4	515.7	499.2	487.9	494.0	506.5	508.4	522.1	526.5	512.0	487.2
35°	556.8	545.3	521.4	509.3	509.8	522.9	524.6	544.8	557.9	533.4	503.3
37.5°	608.5	602.8	564.0	531.5	534.1	553.9	559.0	581.0	577.3	545.1	521.5
40°	721.8	712.9	671.6	593.9	557.4	579.1	580.7	592.4	592.7	571.6	559.6
42.5°	876.1	872.4	828.9	707.0	603.2	595.9	598.8	618.6	640.7	627.5	626.9
45°	1046.9	1045.0	998.9	857.2	695.9	651.1	654.8	681.2	723.6	726.5	745.1
47.5°	1184.4	1183.5	1157.0	1024.8	837.7	744.6	745.8	773.9	848.3	885.0	914.7
50°	1309.7	1313.9	1293.0	1206.2	1030.9	891.2	888.4	907.1	1026.6	1086.7	1123.6
52.5°	1483.8	1489.8	1431.2	1375.4	1233.7	1073.0	1070.8	1090.4	1240.9	1285.9	1292.5
55°	1637.7	1627.4	1581.0	1564.9	1480.9	1297.5	1296.9	1314.2	1448.1	1467.3	1479.5
57.5°	1705.6	1701.7	1724.1	1760.9	1739.9	1562.9	1561.6	1548.4	1633.6	1635.6	1673.0
60°	1748.5	1753.3	1822.0	1935.7	1988.3	1848.5	1840.0	1759.6	1810.7	1806.2	1846.1
62.5°	1716.3	1725.8	1849.4	2038.9	2174.2	2097.8	2085.8	1953.1	1962.1	1946.4	1983.6
65°	1545.3	1560.1	1762.6	2019.4	2266.4	2292.6	2280.4	2124.0	2082.2	2056.5	2035.8
67.5°	1254.8	1263.5	1474.9	1850.1	2224.8	2408.8	2406.3	2273.7	2173.0	2037.9	1877.8
69°	1037.0	1045.6	1249.1	1671.8	2133.3	2433.7	2438.5	2321.7	2155.7	1924.9	1663.7
70°	878.3	887.5	1077.1	1519.0	2027.2	2422.1	2430.8	2317.2	2106.3	1794.0	1475.9
72.5°	460.7	468.6	663.1	1046.5	1652.6	2224.1	2250.3	2121.3	1785.4	1302.9	872.7
75°	144.8	149.3	258.9	547.0	1131.5	1729.3	1735.3	1664.0	1267.8	716.7	363.5
77.5°	55.2	53.9	86.2	201.6	572.1	1088.9	1125.7	1039.9	665.3	253.4	83.9
80°	29.7	29.9	44.8	83.4	244.7	559.6	590.6	504.0	236.4	79.0	19.3
82.5°	12.9	13.5	25.2	44.2	112.4	206.4	221.9	184.7	90.3	53.1	7.2
85°	2.8	3.1	12.1	24.0	45.8	58.0	60.7	59.9	57.5	41.3	2.8
87.5°	0.0	0.0	5.4	8.6	11.6	13.2	11.6	15.1	31.8	27.8	1.5
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°	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8	312.8
2.5°	313.1	310.5	305.9	301.0	297.4	293.8	290.9	289.5	288.1	287.0	288.4
5°	312.5	307.4	298.6	290.1	284.0	279.0	274.9	273.3	271.7	270.5	270.4
7.5°	317.6	310.5	297.0	284.6	275.0	268.3	262.8	260.4	258.5	257.6	256.9
10°	327.5	318.2	300.2	284.0	271.7	260.3	248.3	239.0	233.0	230.3	229.2
12.5°	340.2	328.6	306.4	287.0	269.2	247.2	221.8	199.8	185.6	180.9	178.1
15°	355.1	340.8	314.4	291.0	260.1	220.0	176.8	148.1	135.0	132.3	129.4
17.5°	369.5	353.7	324.1	291.7	240.2	175.8	129.5	110.1	105.0	106.7	107.1
20°	382.1	366.4	333.6	285.3	204.1	131.9	100.3	95.4	97.3	100.7	101.3
22.5°	394.8	378.7	342.4	268.3	157.8	100.1	90.3	91.5	93.4	96.8	97.3
25°	410.3	393.6	350.6	237.1	118.4	85.2	85.8	87.5	89.4	92.5	92.8
27.5°	428.2	412.5	356.0	196.6	87.8	78.3	80.2	82.9	84.8	87.7	88.3
30°	451.9	437.4	357.8	154.6	73.6	72.2	73.0	76.3	79.0	81.7	82.1
32.5°	474.1	462.0	351.9	116.7	68.2	66.5	66.5	68.4	71.6	74.1	74.7
35°	494.6	486.7	333.2	85.3	64.1	61.2	59.7	59.7	61.8	63.8	64.4
37.5°	521.7	521.4	302.9	68.1	60.2	56.8	53.7	51.4	50.6	51.1	51.4
40°	568.1	568.5	263.3	61.0	56.8	52.3	47.6	43.3	39.4	38.1	37.9
42.5°	640.6	634.0	221.9	57.7	53.9	47.6	40.5	34.8	28.7	26.8	26.6
45°	755.6	716.5	178.0	54.6	50.8	42.3	33.5	25.8	20.8	19.3	19.3
47.5°	923.2	825.0	137.9	51.2	46.7	36.3	25.3	18.6	15.2	14.5	14.6
50°	1096.5	931.3	105.7	47.0	41.7	30.0	18.7	13.5	11.6	11.6	11.7
52.5°	1250.2	1009.1	82.4	42.5	35.6	23.6	14.2	10.5	9.7	9.5	9.7
55°	1394.1	1059.3	63.1	37.2	28.3	17.6	10.8	8.6	8.1	7.8	7.6
57.5°	1532.9	1084.2	47.3	30.0	20.5	12.7	8.6	7.3	6.7	6.3	6.1
60°	1625.3	1064.0	32.5	22.1	14.2	9.2	7.2	6.3	5.6	5.1	5.0
62.5°	1677.4	1008.8	20.9	16.0	10.1	6.9	5.7	5.3	4.2	3.8	3.8
65°	1656.3	917.8	14.6	11.4	7.3	5.1	4.2	4.2	3.1	2.5	2.3
67.5°	1467.7	775.4	11.1	8.5	5.3	3.8	3.2	3.7	1.9	1.2	1.2
69°	1262.8	642.6	9.5	7.0	4.4	3.1	2.8	3.4	1.3	0.9	0.7
70°	1097.6	554.3	8.6	6.1	3.7	2.6	2.5	3.2	1.3	0.7	0.6
72.5°	656.7	309.2	6.6	4.4	2.3	2.0	2.0	3.7	1.3	0.7	0.6
75°	265.4	108.9	4.8	3.1	1.8	1.8	2.5	4.7	1.2	0.6	0.4
77.5°	60.2	23.9	2.8	1.9	1.2	1.8	2.9	3.7	0.7	0.3	0.0
80°	14.6	5.9	1.8	1.2	0.7	1.3	2.2	2.0	0.1	0.0	0.0
82.5°	4.8	2.0	0.7	0.6	0.1	0.4	1.0	0.6	0.0	0.0	0.0
85°	2.0	1.2	0.3	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
87.5°	1.3	0.4	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)