

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: P214575

Luminaire Tested: **ARCH-AF24-40-D-U-T2R-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214575
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-40-D-U-T2R-7030
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4571 lumens
Efficiency: N/A
Efficacy: 114.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G1

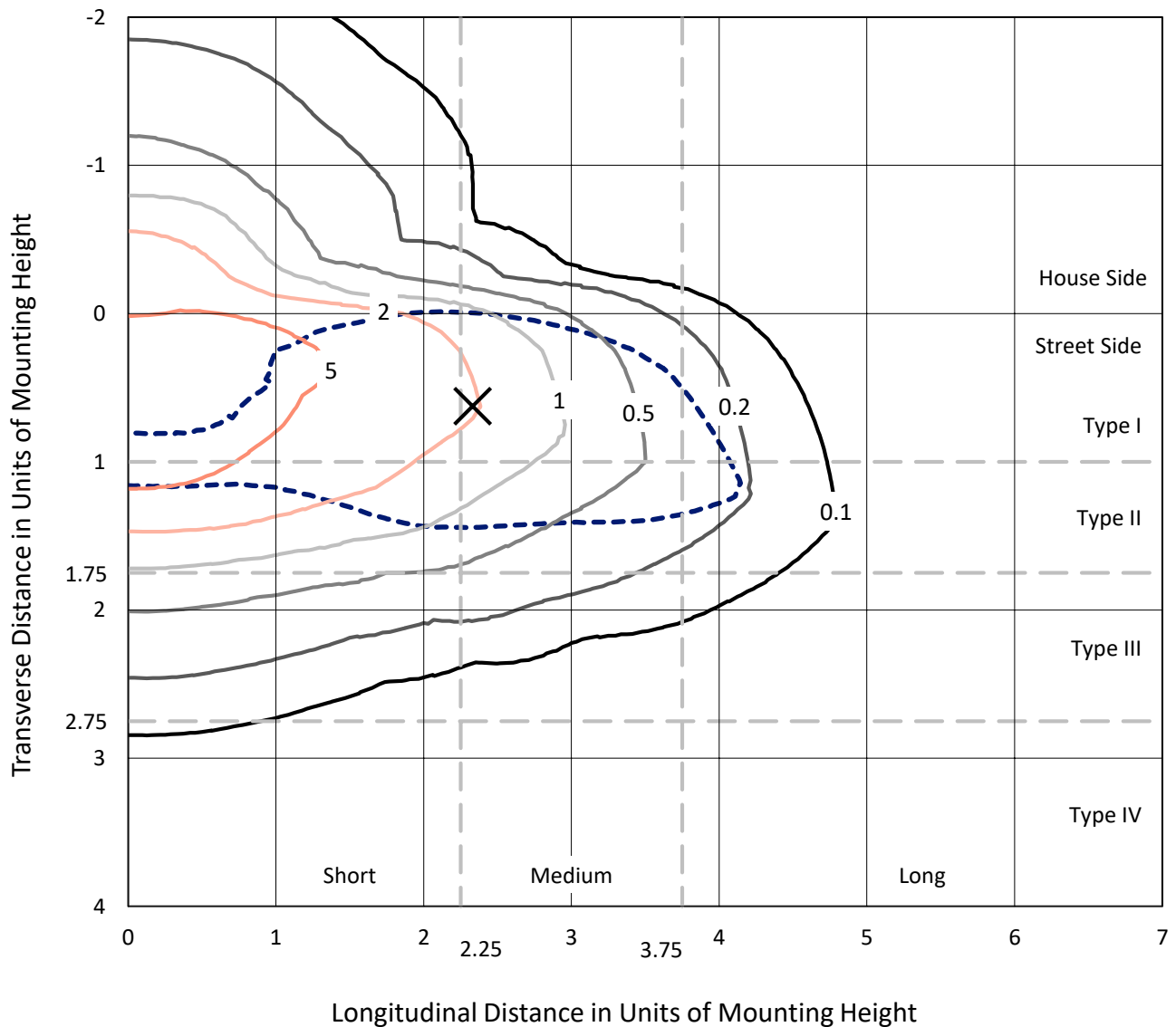
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

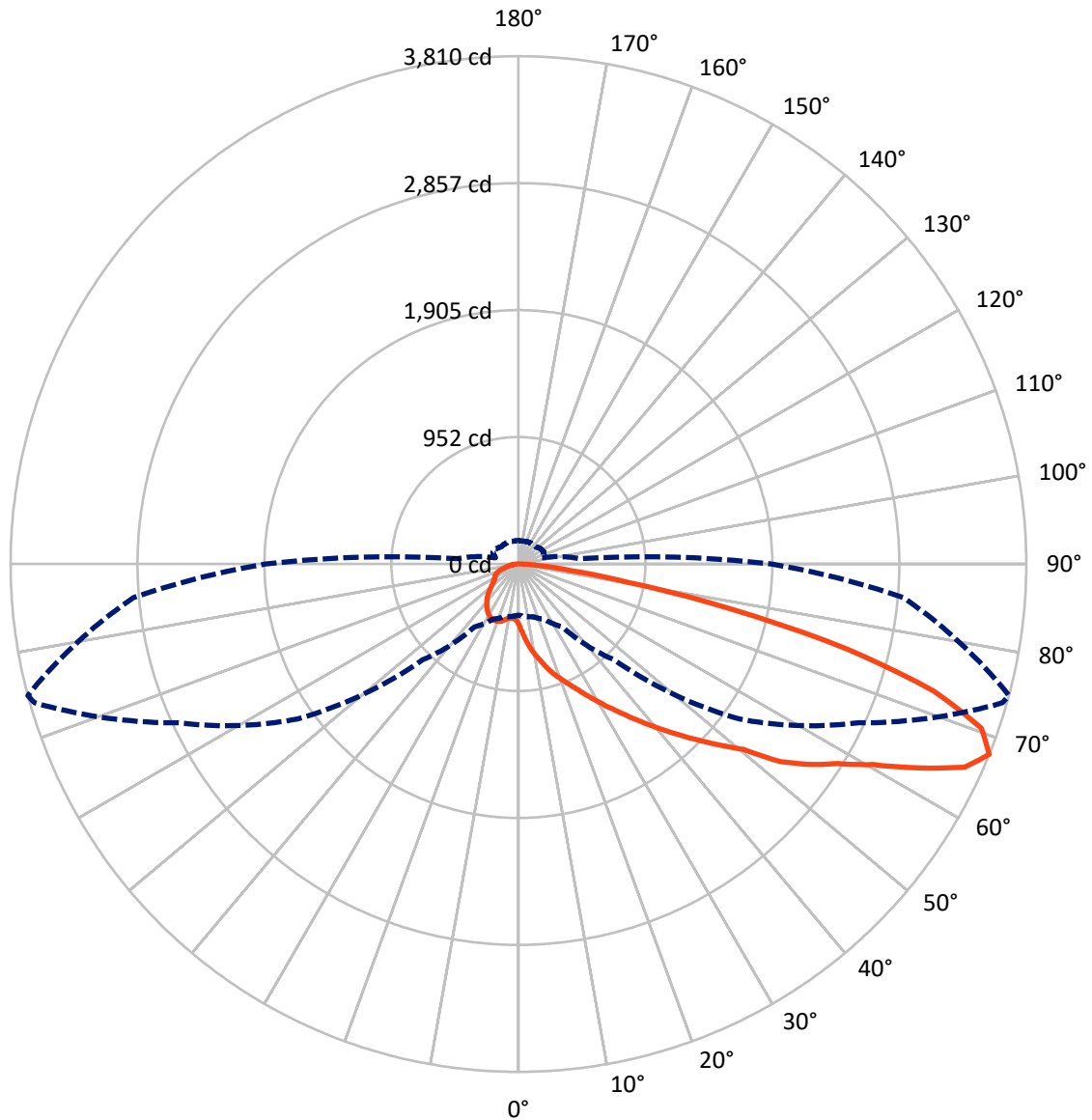
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.5 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	780.6	0.0	780.6
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	3790.4	0.0	3790.4
	% Fixture	82.9	0.0	82.9
Total	Lumens	4571.0	0.0	4571.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.2	1.2
10°-20°	192.3	4.2
20°-30°	350.7	7.7
30°-40°	575.7	12.6
40°-50°	832.5	18.2
50°-60°	981.2	21.5
60°-70°	953.4	20.9
70°-80°	530.0	11.6
80°-90°	101.9	2.2
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°	4571.0	100.0
0°-180°	4571.0	100.0

Coefficient of Utilization



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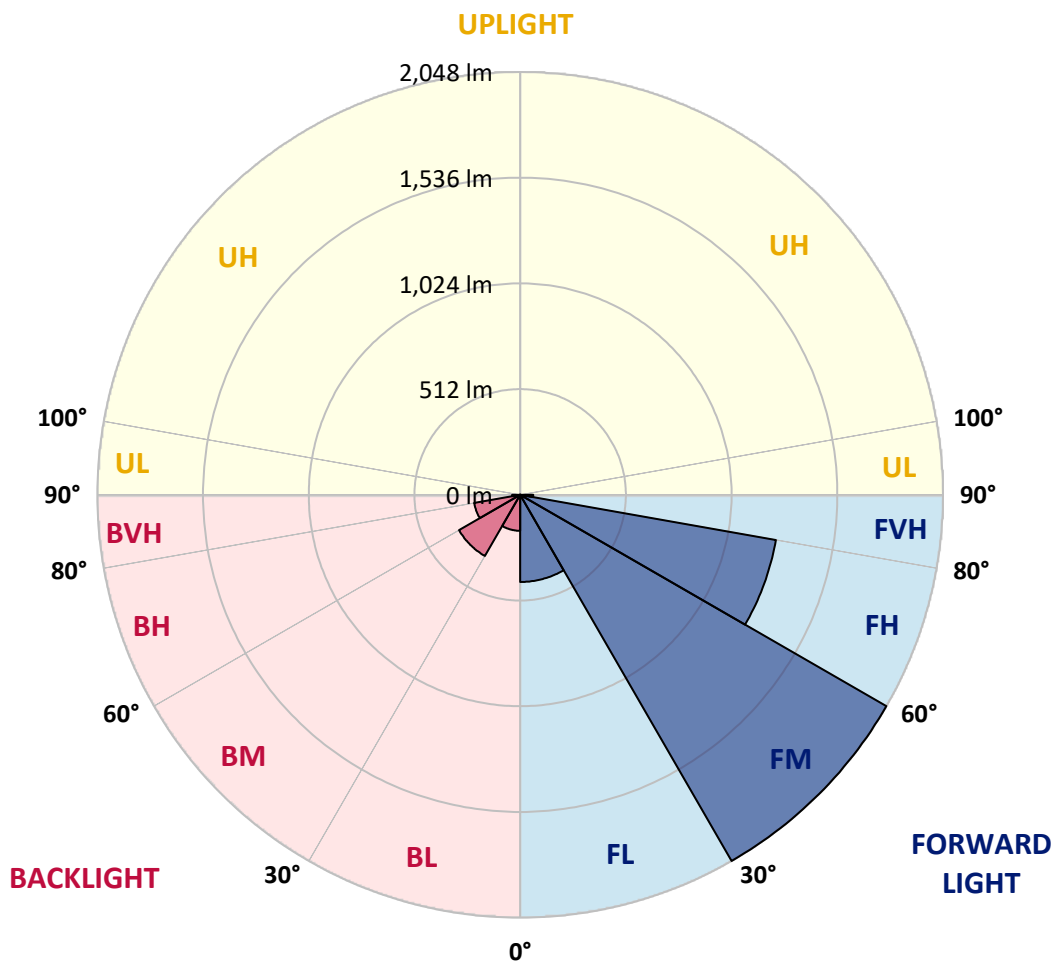
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	422.0	9.2			
FM (30°-60°)	2047.6	44.8			
FH (60°-80°)	1257.4	27.5			G1/1800
FVH (80°-90°)	63.4	1.4			G1/100
BL (0°-30°)	174.2	3.8	B1/500		
BM (30°-60°)	341.8	7.5	B1/1000		
BH (60°-80°)	226.0	4.9	B1/500		G1/500
BVH (80°-90°)	38.5	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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	452.9	452.9	452.9	452.9	452.9	452.9	452.9	452.9	452.9	452.9	452.9
2.5°	642.1	644.1	640.2	631.6	619.2	596.3	576.2	540.9	509.3	505.5	472.1
5°	754.9	756.8	752.0	741.5	728.1	703.3	675.6	629.7	579.1	569.5	498.8
7.5°	832.3	833.3	827.5	817.0	806.5	781.7	753.9	702.3	640.2	632.6	533.2
10°	898.2	900.1	892.5	885.8	874.3	849.5	820.8	766.4	702.3	691.8	568.6
12.5°	959.4	961.3	956.5	950.8	947.0	924.0	892.5	827.5	758.7	747.3	610.6
15°	1000.5	1002.4	1003.4	1011.0	1015.8	999.5	968.0	897.3	819.9	809.4	660.3
17.5°	989.0	993.8	1008.1	1035.8	1065.5	1066.4	1040.6	966.1	880.1	868.6	710.9
20°	955.6	959.4	976.6	1018.6	1076.9	1110.4	1108.5	1035.8	936.5	924.0	757.8
22.5°	983.3	988.1	988.1	1013.9	1071.2	1133.3	1158.2	1104.6	992.8	981.4	804.6
25°	1101.8	1104.6	1084.6	1074.1	1095.1	1152.4	1199.2	1179.2	1061.6	1048.3	855.2
27.5°	1267.1	1262.3	1237.5	1195.4	1172.5	1187.8	1235.6	1249.9	1141.0	1124.7	907.8
30°	1431.4	1428.6	1399.9	1343.5	1291.9	1259.4	1275.7	1313.0	1227.0	1207.8	958.4
32.5°	1585.3	1580.5	1549.0	1483.0	1424.8	1364.6	1333.0	1370.3	1318.7	1296.7	1014.8
35°	1726.7	1714.3	1682.8	1614.0	1553.8	1496.4	1419.0	1424.8	1418.1	1395.1	1076.9
37.5°	1841.4	1831.8	1797.4	1733.4	1669.4	1614.9	1533.7	1486.9	1525.1	1503.1	1148.6
40°	1942.7	1932.2	1896.8	1832.8	1773.5	1721.9	1657.9	1562.4	1645.5	1620.7	1228.9
42.5°	2019.1	2011.5	1982.8	1919.7	1862.4	1815.6	1784.1	1657.9	1770.7	1746.8	1316.8
45°	2060.2	2052.6	2037.3	1986.6	1934.1	1897.8	1900.6	1771.6	1901.6	1881.5	1420.9
47.5°	2009.6	2015.3	2028.7	2019.1	1986.6	1969.4	2004.8	1889.2	2047.8	2028.7	1533.7
50°	1873.9	1879.6	1933.1	1999.1	2010.5	2031.5	2098.4	2024.9	2202.6	2187.3	1673.2
52.5°	1540.4	1571.9	1720.0	1877.7	1985.7	2072.6	2202.6	2226.5	2463.5	2463.5	1919.7
55°	1163.9	1191.6	1360.7	1635.9	1889.2	2076.5	2279.0	2363.1	2651.7	2655.5	2048.7
57.5°	943.1	960.4	1043.5	1325.4	1686.6	2028.7	2369.8	2480.7	2808.4	2825.6	2215.0
60°	765.4	775.0	829.4	1025.3	1406.6	1899.7	2434.8	2648.8	3032.0	3055.9	2427.2
62.5°	615.4	624.9	661.3	778.8	1103.7	1657.9	2423.3	2823.7	3330.2	3369.3	2705.2
65°	491.2	501.7	525.6	598.2	818.0	1357.9	2305.8	2913.5	3638.8	3677.0	2889.7
67.5°	383.2	392.7	409.0	456.8	576.2	1015.8	2027.7	2818.9	3777.4	3809.9	2899.2
70°	289.5	294.3	307.7	338.3	411.9	674.6	1587.2	2501.7	3653.2	3682.8	2708.1
72.5°	224.6	223.6	231.2	246.5	287.6	464.4	1052.1	2034.4	3229.8	3260.4	2310.6
75°	183.5	182.5	187.3	192.1	208.3	311.5	621.1	1531.8	2606.8	2548.5	1733.4
77.5°	154.8	153.8	158.6	159.6	166.3	215.0	353.6	1008.1	1739.1	1638.8	976.6
80°	130.9	130.0	135.7	137.6	142.4	157.7	203.5	545.6	873.4	827.5	466.3
82.5°	98.4	102.2	112.8	117.5	123.3	116.6	126.1	240.8	405.2	387.0	202.6
85°	47.8	56.4	85.0	94.6	101.3	73.6	86.0	113.7	182.5	173.9	82.2
87.5°	16.2	14.3	50.6	60.2	65.9	33.4	47.8	63.1	75.5	68.8	25.8
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°	452.9	452.9	452.9	452.9	452.9	452.9	452.9	452.9	452.9	452.9	452.9
2.5°	457.7	443.4	422.4	406.1	395.6	387.0	383.2	382.2	380.3	379.4	379.4
5°	467.3	441.5	409.0	391.8	387.0	383.2	385.1	386.1	386.1	386.1	386.1
7.5°	481.6	445.3	406.1	394.7	393.7	393.7	399.4	402.3	404.2	404.2	404.2
10°	500.7	452.0	410.9	401.3	404.2	406.1	412.8	416.6	418.5	419.5	420.5
12.5°	526.5	466.3	420.5	412.8	416.6	417.6	422.4	424.3	426.2	427.1	427.1
15°	560.9	487.3	435.7	426.2	427.1	426.2	426.2	424.3	423.3	423.3	425.2
17.5°	596.3	507.4	449.1	435.7	431.9	424.3	418.5	413.8	410.9	409.0	409.9
20°	631.6	525.6	456.8	437.7	427.1	414.7	404.2	397.5	393.7	389.9	391.8
22.5°	667.0	542.8	459.6	431.9	416.6	398.5	387.0	376.5	367.9	362.2	363.1
25°	706.2	561.9	459.6	425.2	402.3	383.2	368.9	351.7	339.2	334.5	336.4
27.5°	745.3	578.1	454.9	412.8	386.1	366.9	345.9	325.9	318.2	315.3	316.3
30°	784.5	590.5	444.3	397.5	368.9	347.8	320.1	306.7	297.2	289.5	290.5
32.5°	823.7	599.1	430.0	378.4	350.7	323.9	301.0	285.7	268.5	259.0	259.9
35°	868.6	605.8	412.8	359.3	330.6	302.9	285.7	260.9	242.7	235.1	233.2
37.5°	915.4	610.6	394.7	338.3	310.6	287.6	270.4	239.8	222.6	212.1	211.2
40°	966.1	612.5	372.7	316.3	291.4	278.1	250.4	227.4	197.8	191.1	191.1
42.5°	1026.3	611.6	350.7	294.3	270.4	256.1	236.0	225.5	199.7	193.0	189.2
45°	1095.1	611.6	326.8	268.5	249.4	228.4	219.8	213.1	195.9	198.8	200.7
47.5°	1173.4	609.7	298.1	247.5	232.2	214.0	209.3	194.9	188.2	190.2	192.1
50°	1281.4	612.5	272.3	230.3	219.8	204.5	198.8	191.1	188.2	189.2	188.2
52.5°	1431.4	603.0	247.5	219.8	210.2	190.2	190.2	189.2	190.2	189.2	189.2
55°	1513.6	581.9	229.3	214.0	203.5	183.5	187.3	189.2	191.1	190.2	190.2
57.5°	1630.2	567.6	215.0	210.2	199.7	181.6	185.4	189.2	190.2	189.2	189.2
60°	1767.8	558.1	205.4	211.2	196.8	181.6	186.3	189.2	188.2	187.3	187.3
62.5°	1927.4	554.2	198.8	214.0	194.0	182.5	186.3	189.2	185.4	184.4	184.4
65°	1987.6	519.8	190.2	216.0	195.9	182.5	185.4	186.3	181.6	180.6	179.6
67.5°	1894.9	460.6	177.7	212.1	201.6	182.5	182.5	181.6	175.8	174.9	173.0
70°	1687.5	382.2	158.6	199.7	205.4	183.5	178.7	173.9	168.2	168.2	164.4
72.5°	1381.8	301.0	133.8	177.7	202.6	186.3	171.0	164.4	157.7	157.7	153.8
75°	995.7	224.6	107.0	148.1	190.2	185.4	161.5	152.9	145.2	144.3	139.5
77.5°	567.6	157.7	87.0	115.6	169.1	180.6	152.9	139.5	130.9	128.0	125.2
80°	291.4	106.1	70.7	90.8	140.5	167.2	146.2	124.2	114.7	109.9	105.1
82.5°	138.6	70.7	54.5	66.9	106.1	146.2	137.6	107.0	96.5	90.8	85.0
85°	62.1	42.0	36.3	43.0	75.5	113.7	121.4	87.9	75.5	94.6	69.8
87.5°	20.1	19.1	19.1	20.1	36.3	49.7	88.9	65.0	60.2	49.7	42.0
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)