

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: P214811

Luminaire Tested: **ARCH-AF24-20-D-U-T3-7050-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214811
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-20-D-U-T3-7050-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 260mA 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: 2039 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 21
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

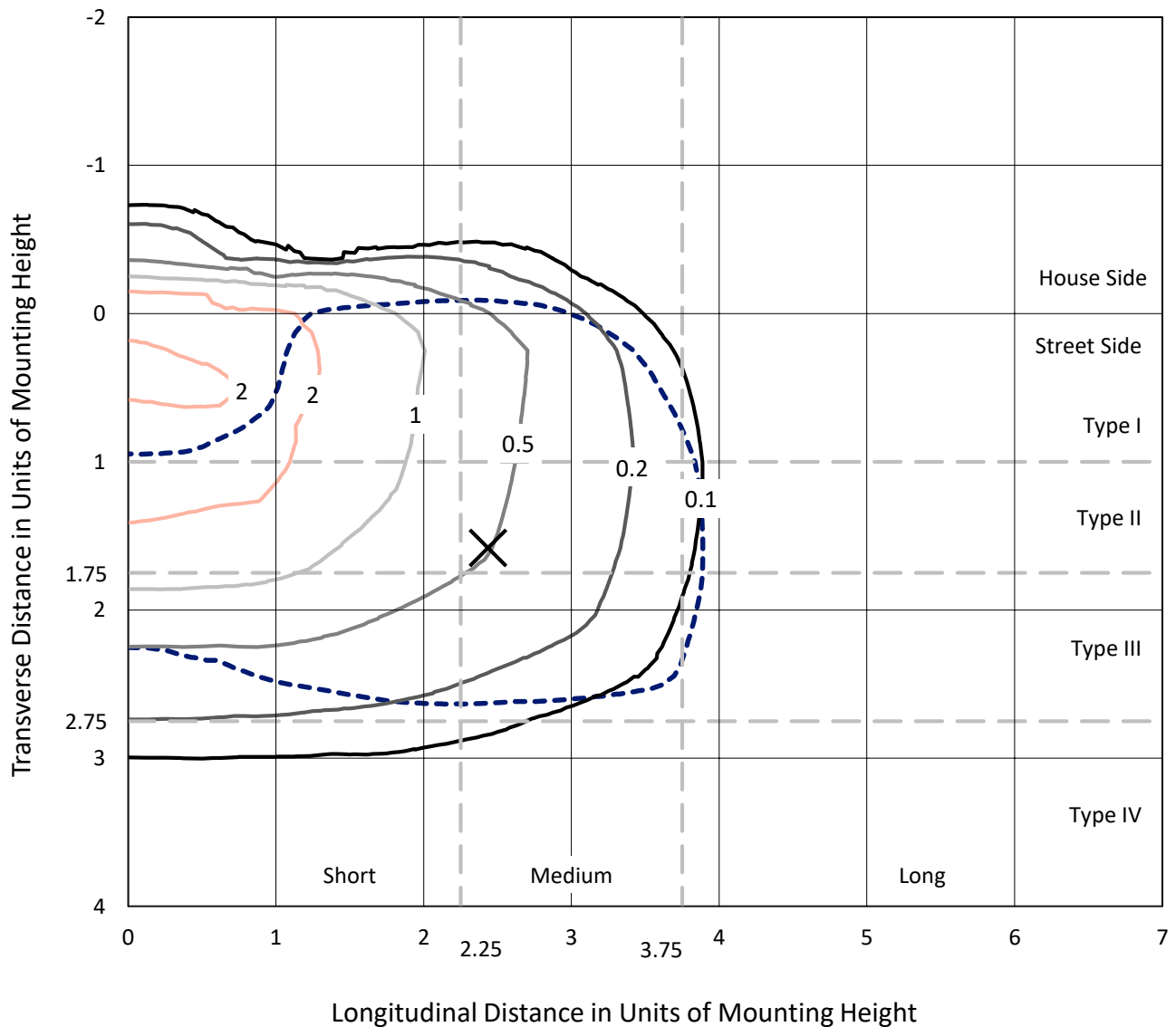


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

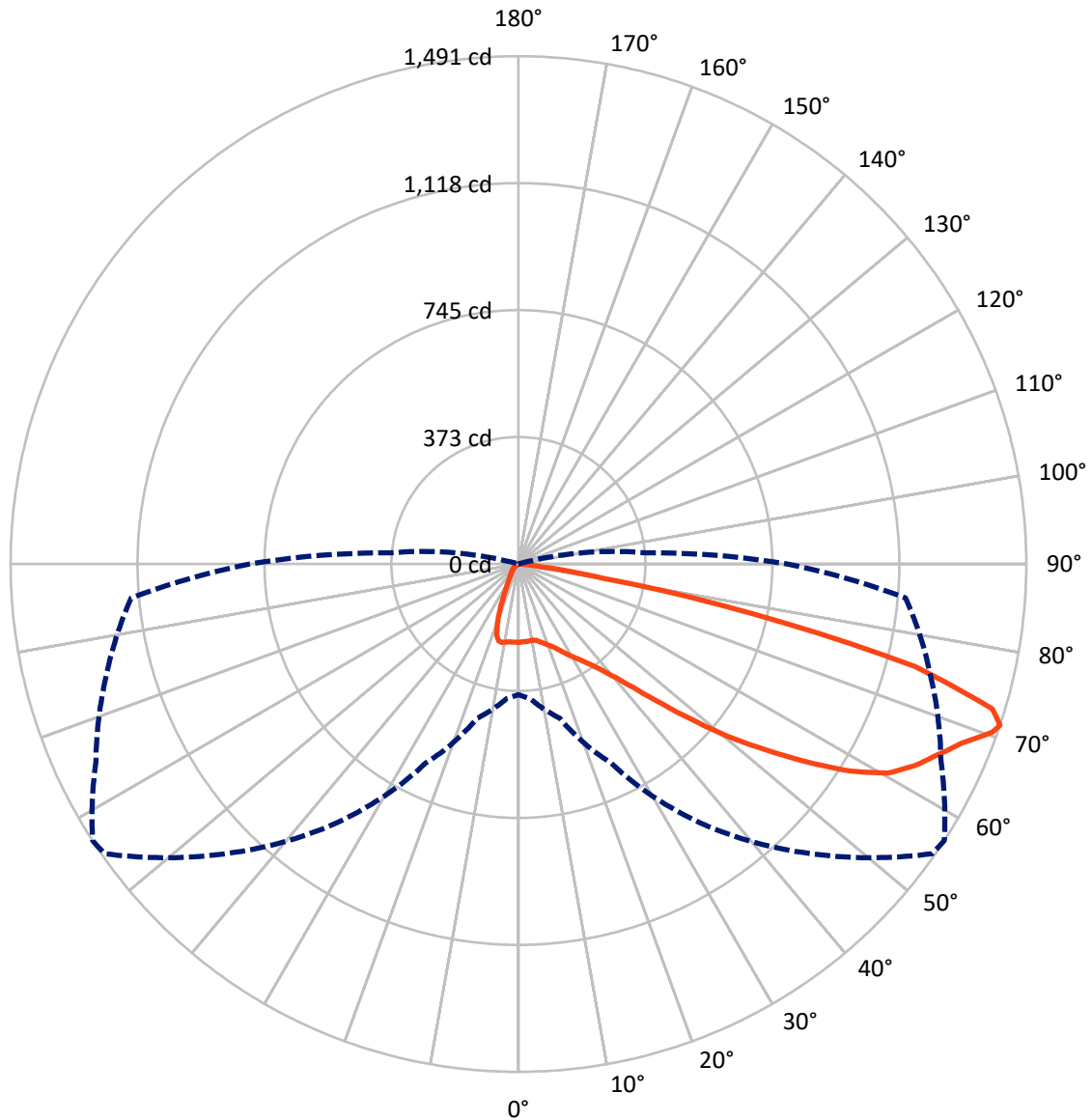


Based on 10 foot mounting height. Maximum calculated value = 2.9 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical



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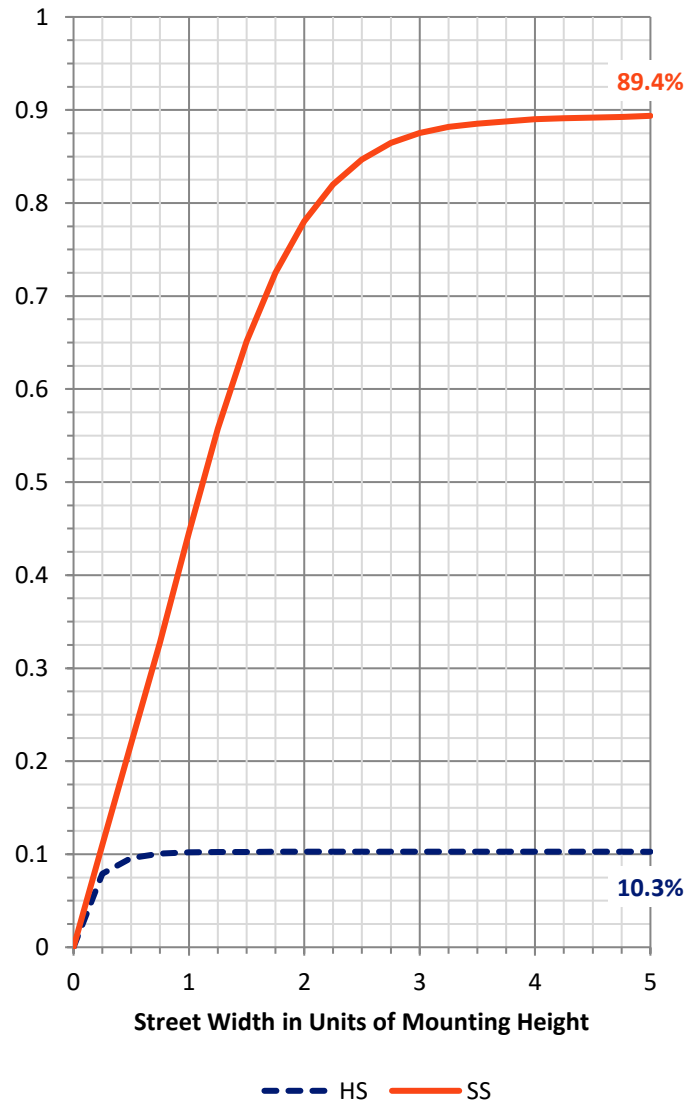
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	211.3	0.0	211.3
	% Fixture	10.4	0.0	10.4
Street Side	Lumens	1827.7	0.0	1827.7
	% Fixture	89.6	0.0	89.6
Total	Lumens	2039.0	0.0	2039.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.6	1.1
10°-20°	57.9	2.8
20°-30°	90.3	4.4
30°-40°	152.6	7.5
40°-50°	296.3	14.5
50°-60°	497.6	24.4
60°-70°	593.9	29.1
70°-80°	313.0	15.3
80°-90°	15.9	0.8
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°	2039.0	100.0
0°-180°	2039.0	100.0

Coefficient of Utilization



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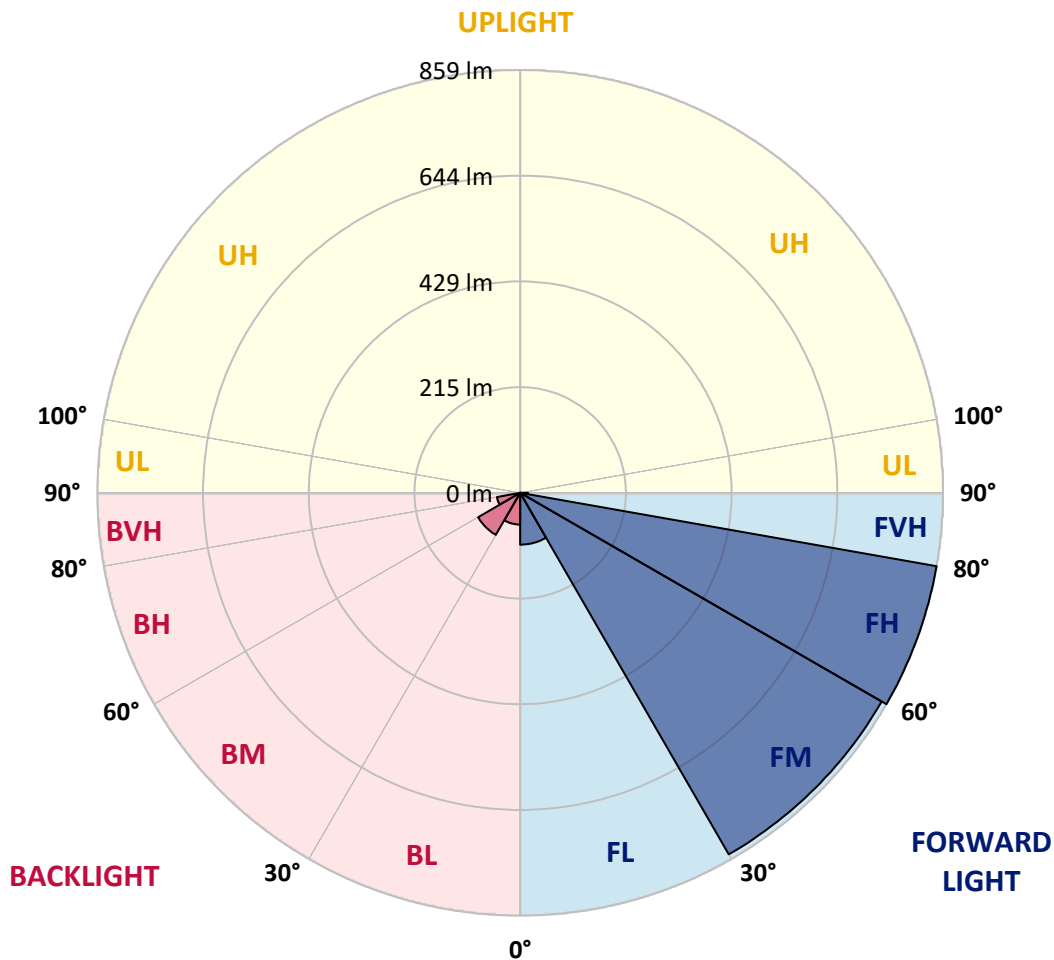
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	105.3	5.2			
FM	(30°-60°)	847.8	41.6			
FH	(60°-80°)	858.8	42.1			G1/1800
FVH	(80°-90°)	15.8	0.8			G1/100
BL	(0°-30°)	64.5	3.2	B0/110		
BM	(30°-60°)	98.7	4.8	B0/220		
BH	(60°-80°)	48.0	2.4	B0/110		G0/110
BVH	(80°-90°)	0.2	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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4
2.5°	227.1	227.1	227.1	227.6	228.1	228.1	229.0	228.5	228.5	228.5	229.5
5°	220.9	221.4	221.9	222.8	224.7	226.2	228.5	228.5	229.0	230.0	230.4
7.5°	212.4	212.9	214.3	216.2	220.0	223.3	227.1	228.1	229.5	231.9	232.8
10°	207.2	208.1	210.0	212.4	216.7	220.9	225.7	227.1	231.4	235.7	238.0
12.5°	205.7	206.2	208.1	211.9	217.1	222.4	228.5	230.0	236.1	242.8	246.6
15°	208.1	208.6	209.5	213.8	220.0	226.6	234.7	236.6	244.2	251.8	256.6
17.5°	212.4	212.4	213.3	217.1	223.8	231.4	241.8	244.7	253.2	261.8	267.0
20°	215.2	215.2	216.7	220.5	228.1	238.0	250.4	254.2	263.7	273.2	278.0
22.5°	218.1	218.6	220.0	224.3	232.8	246.6	260.8	264.6	275.6	285.6	290.3
25°	226.2	225.7	226.2	230.0	239.9	257.0	275.1	279.9	291.3	302.2	304.6
27.5°	248.5	247.5	241.4	239.0	246.6	268.0	293.2	297.9	311.2	322.1	322.1
30°	299.8	297.9	282.7	263.2	257.0	278.0	310.3	316.9	334.0	343.5	340.7
32.5°	364.9	360.6	341.1	307.9	283.2	291.3	328.3	335.9	357.8	365.8	359.7
35°	436.2	435.7	411.5	368.7	333.5	318.8	351.6	360.6	388.2	395.3	385.3
37.5°	511.7	513.6	497.5	438.5	397.2	363.9	382.5	392.9	426.7	435.2	425.7
40°	595.8	595.3	589.2	519.3	473.7	428.1	427.1	436.6	477.5	490.8	477.5
42.5°	702.2	701.3	679.0	616.2	566.4	511.7	492.2	495.6	541.2	563.0	543.5
45°	810.6	803.9	778.3	724.1	679.9	615.3	578.2	578.2	617.2	647.1	616.7
47.5°	870.9	864.3	853.8	823.9	810.6	738.4	683.7	677.1	707.5	737.9	695.1
50°	950.3	950.3	924.1	912.7	935.5	884.7	800.1	793.5	808.2	832.4	776.4
52.5°	1013.0	1001.6	983.0	993.0	1058.1	1034.8	916.5	903.7	915.1	921.3	847.2
55°	1039.1	1028.2	1026.8	1063.3	1164.1	1131.8	1035.8	1024.4	1023.4	993.0	908.9
57.5°	1044.3	1034.8	1052.9	1117.0	1267.2	1211.1	1154.6	1146.0	1119.4	1043.4	972.1
60°	1000.1	1004.9	1048.6	1146.5	1328.0	1280.0	1254.8	1245.8	1184.5	1086.1	1042.4
62.5°	909.4	920.8	1002.5	1149.3	1305.7	1308.0	1310.4	1304.2	1234.9	1125.1	1113.2
65°	802.0	805.3	903.7	1109.9	1266.7	1299.5	1351.3	1350.8	1273.3	1168.8	1193.1
67.5°	660.9	666.6	751.7	976.9	1188.8	1295.7	1405.0	1403.5	1317.1	1218.7	1240.6
70°	491.8	498.9	567.8	759.7	1014.9	1248.2	1475.3	1476.2	1363.1	1256.7	1207.8
71°	383.4	396.3	468.5	645.2	926.0	1200.2	1481.9	1490.5	1368.4	1251.5	1140.3
72.5°	188.2	203.4	294.1	454.2	762.1	1092.8	1438.2	1454.8	1335.6	1186.4	975.0
75°	48.9	51.8	87.9	185.8	408.6	724.1	1159.8	1202.1	1091.8	903.2	595.8
77.5°	30.9	31.8	41.3	72.2	153.0	275.1	681.3	702.2	623.8	457.5	210.0
80°	21.9	22.3	26.1	46.6	89.3	80.3	245.2	254.2	225.7	121.2	37.5
82.5°	13.3	13.3	19.0	29.9	55.1	43.7	64.6	68.9	60.8	33.7	12.4
85°	7.6	8.1	11.9	20.4	26.1	21.4	24.2	25.7	26.1	22.3	5.2
87.5°	6.2	6.7	10.5	17.1	14.3	10.5	10.5	10.9	11.4	13.3	2.4
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°	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4	230.4
2.5°	229.5	229.5	230.0	229.5	229.5	229.5	230.0	230.0	230.0	230.9	231.4
5°	230.4	230.4	230.4	230.0	229.5	229.5	230.4	230.9	230.9	232.3	232.3
7.5°	232.8	232.8	231.9	230.9	230.0	228.5	229.0	229.5	229.0	229.5	229.5
10°	238.0	238.0	236.6	234.7	231.9	227.6	221.9	214.8	208.1	205.7	204.8
12.5°	246.6	246.1	243.3	239.9	233.8	219.0	197.7	172.5	151.6	145.9	144.0
15°	256.1	255.1	251.8	246.1	229.5	190.5	145.9	113.6	93.6	88.8	87.9
17.5°	266.1	264.6	259.9	248.5	210.0	141.6	94.1	71.3	60.3	59.4	59.9
20°	276.5	274.6	268.0	243.7	169.6	94.6	60.8	55.1	54.2	54.2	54.6
22.5°	288.4	286.0	277.0	226.6	123.5	62.7	52.3	51.8	51.3	50.8	50.8
25°	302.2	299.3	285.6	195.8	85.0	51.3	49.9	48.5	47.5	46.6	46.1
27.5°	318.8	315.0	292.2	157.7	58.4	48.0	47.0	44.7	42.8	40.9	40.9
30°	335.4	330.7	290.3	118.8	47.5	44.7	42.8	39.9	37.1	35.2	34.7
32.5°	353.0	348.3	278.0	79.8	43.2	40.9	38.5	34.2	30.9	28.5	28.0
35°	379.2	375.4	253.7	52.7	39.0	36.1	32.8	28.5	24.2	21.9	21.4
37.5°	418.1	413.4	223.8	40.4	34.2	29.9	27.1	22.3	18.1	15.7	15.2
40°	470.4	456.1	188.2	35.6	29.9	24.7	20.9	16.2	12.8	11.4	11.4
42.5°	531.2	497.5	149.7	32.3	26.6	20.4	15.2	10.9	9.0	8.6	8.6
45°	595.8	535.9	111.2	29.9	23.3	16.2	10.9	7.6	6.7	6.2	6.2
47.5°	662.3	567.3	77.4	27.1	19.5	12.4	7.6	5.7	4.8	4.3	4.3
50°	724.6	587.7	54.6	24.2	16.6	9.0	5.7	4.3	3.3	3.3	3.3
52.5°	767.8	585.8	39.4	20.9	12.8	6.2	3.8	2.9	2.9	2.9	2.9
55°	805.8	578.7	30.9	18.1	10.0	4.3	2.9	2.4	2.4	1.9	1.9
57.5°	838.1	567.3	26.1	14.7	7.1	3.3	1.9	1.9	1.4	1.4	1.4
60°	865.7	553.1	21.9	12.4	4.8	2.4	1.4	1.0	1.0	0.5	1.0
62.5°	903.2	544.0	19.0	9.5	3.3	1.4	1.0	0.5	0.5	0.0	0.0
65°	930.8	526.9	16.2	6.7	1.9	1.0	0.5	0.5	0.0	0.0	0.0
67.5°	931.7	496.0	11.9	3.8	1.4	1.0	0.5	0.0	0.0	0.0	0.0
70°	856.7	422.9	7.6	1.9	1.0	0.5	0.5	0.0	0.0	0.0	0.0
71°	787.8	374.4	6.2	1.4	1.0	0.5	0.0	0.0	0.0	0.0	0.0
72.5°	649.0	275.1	4.8	1.4	0.5	0.5	0.0	0.0	0.0	0.0	0.0
75°	357.8	99.8	2.4	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	114.5	30.4	1.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	19.5	4.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.7	1.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	0.5	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)