

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: P265930

Luminaire Tested: **ARCH-AF24-30-D-U-T4W-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265930
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-30-D-U-T4W-7027-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2435 lumens
Efficiency: N/A
Efficacy: 78.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 31
Input Voltage (V): NR
Input Current (A_{in}): 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

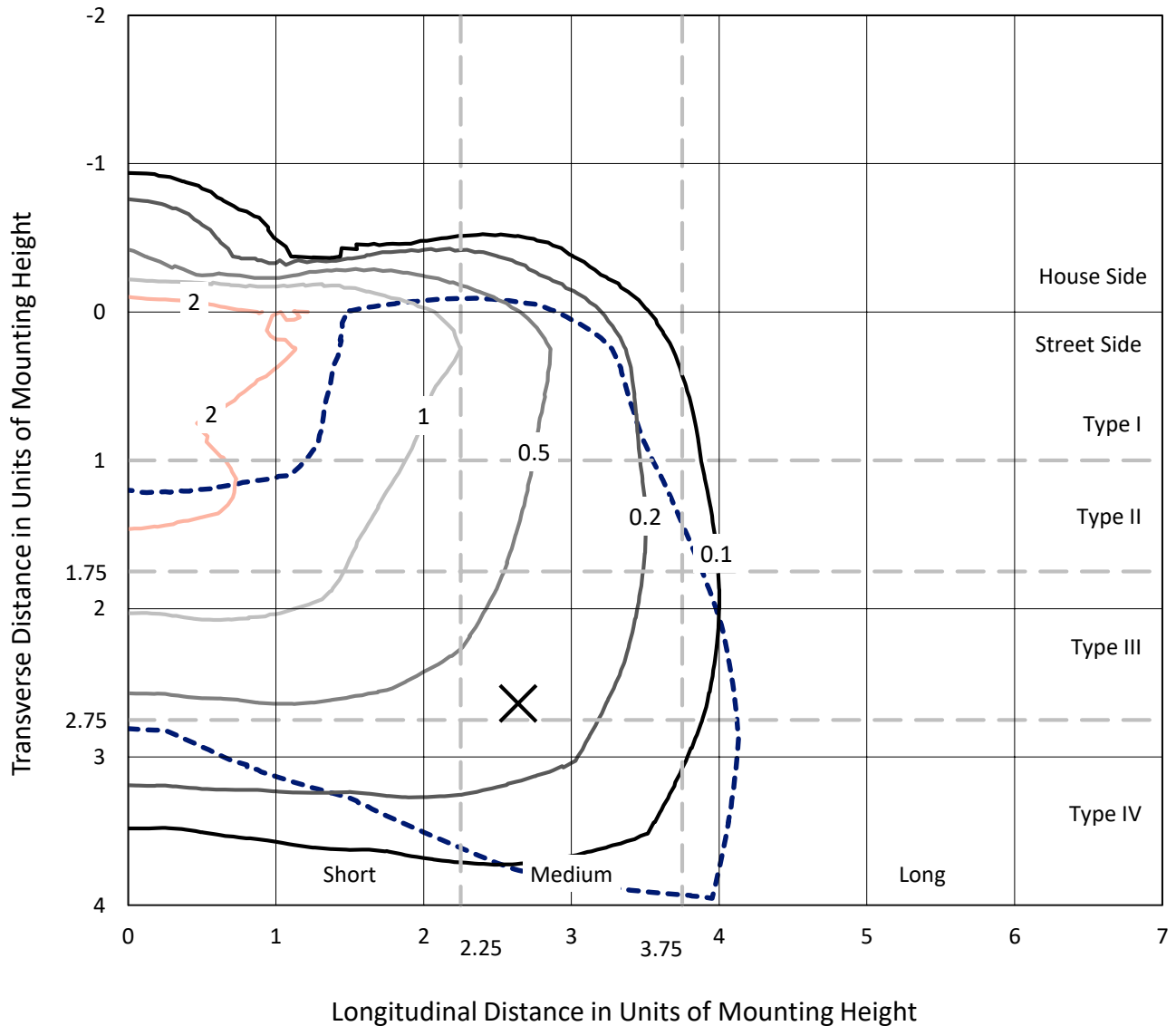


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

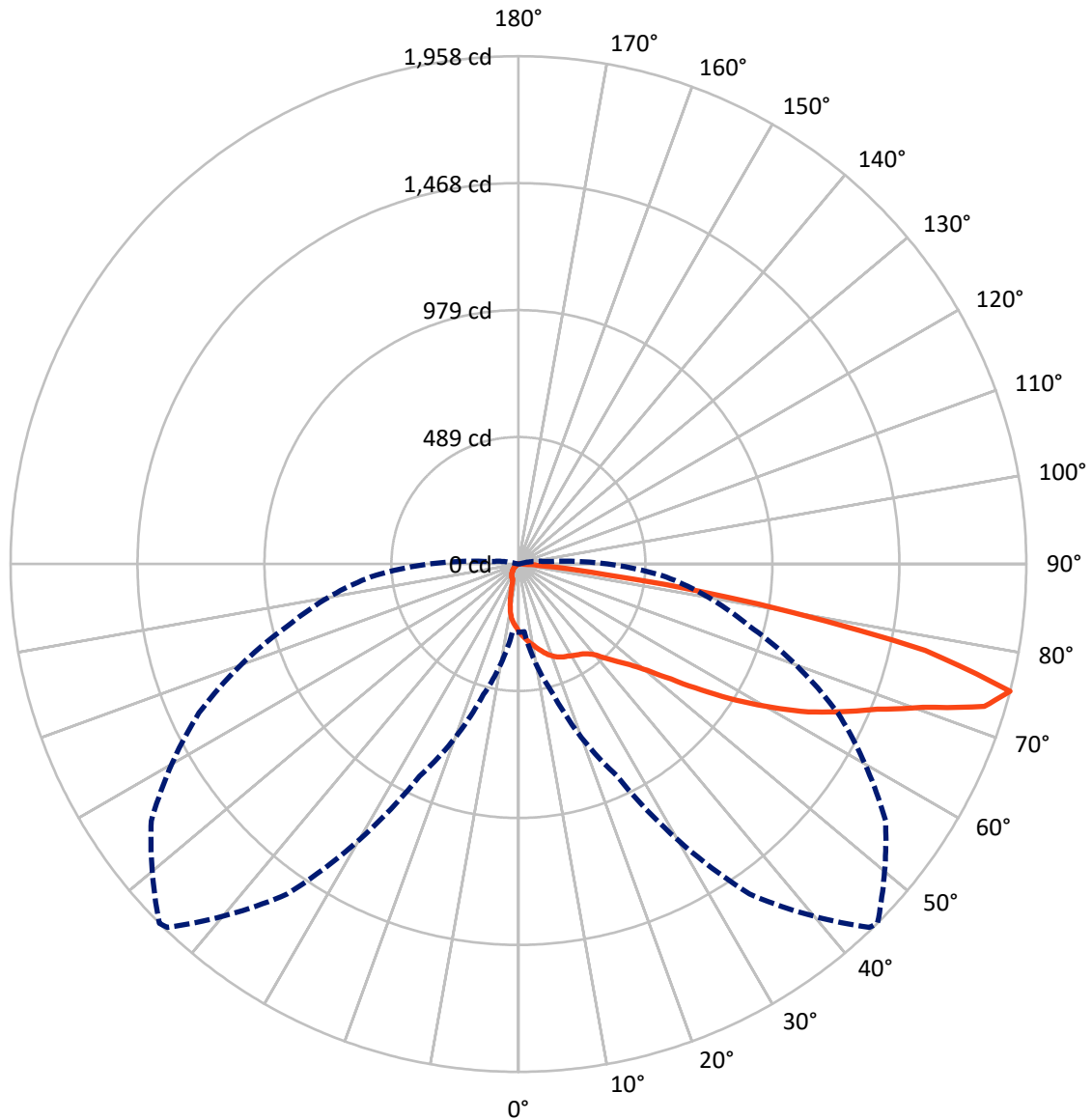


Based on 10 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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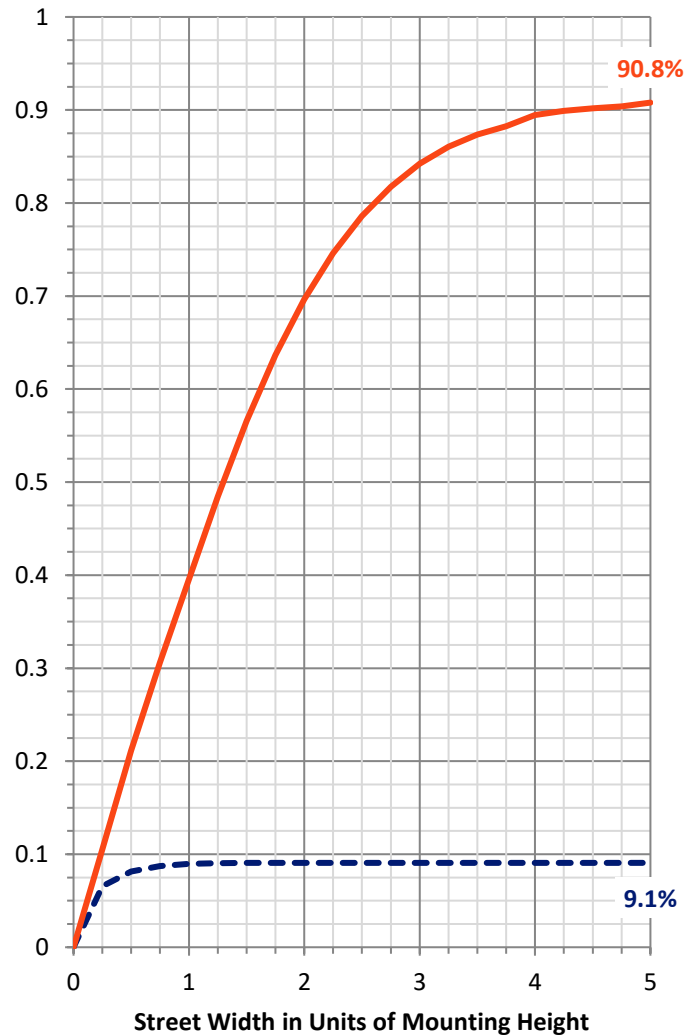
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	222.7	0.0	222.7
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	2212.3	0.0	2212.3
	% Fixture	90.9	0.0	90.9
Total	Lumens	2435.0	0.0	2435.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.6	1.0
10°-20°	69.6	2.9
20°-30°	115.3	4.7
30°-40°	166.9	6.9
40°-50°	273.3	11.2
50°-60°	487.0	20.0
60°-70°	715.9	29.4
70°-80°	540.1	22.2
80°-90°	42.4	1.7
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°	2435.0	100.0
0°-180°	2435.0	100.0



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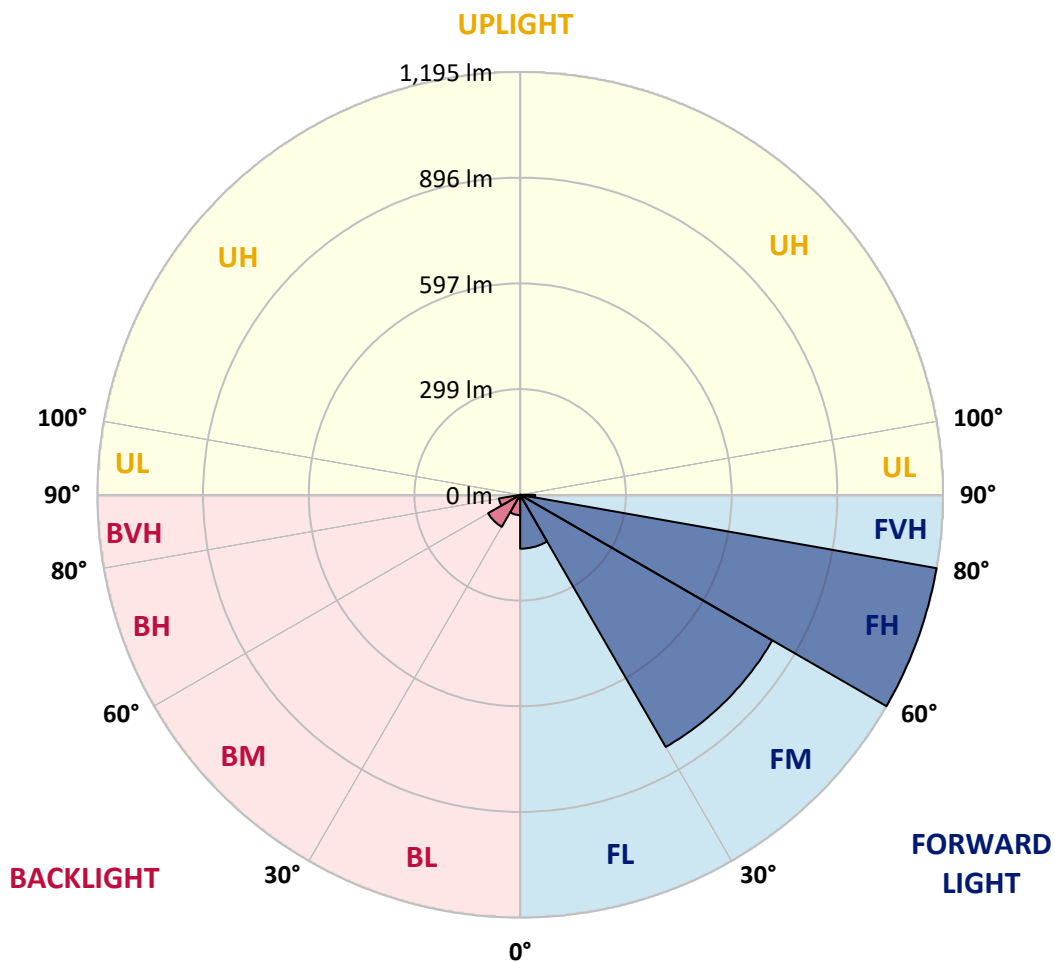
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	152.3	6.3			
FM	(30°-60°)	822.8	33.8			
FH	(60°-80°)	1195.0	49.1			G1/1800
FVH	(80°-90°)	42.3	1.7			G1/100
BL	(0°-30°)	57.2	2.4	B0/110		
BM	(30°-60°)	104.4	4.3	B0/220		
BH	(60°-80°)	61.0	2.5	B0/110		G0/110
BVH	(80°-90°)	0.1	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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	260.5	260.5	260.5	260.5	260.5	260.5	260.5	260.5	260.5	260.5	260.5
2.5°	283.0	283.0	282.3	281.8	278.8	276.0	275.4	273.8	268.6	265.1	261.5
5°	306.5	307.1	306.0	303.1	296.7	290.4	289.9	285.2	275.4	268.6	261.0
7.5°	329.0	330.1	327.3	322.1	314.5	305.3	304.9	296.3	283.4	273.8	262.8
10°	348.1	348.1	344.1	337.7	329.6	319.7	318.7	308.8	294.5	282.3	268.0
12.5°	368.8	368.1	362.5	353.8	344.6	335.3	334.8	322.8	308.8	293.2	275.4
15°	387.8	386.6	379.2	371.1	361.3	351.4	350.9	338.8	324.4	306.0	286.4
17.5°	398.2	397.6	390.7	382.6	374.6	367.0	366.5	353.8	338.2	319.2	297.2
20°	399.8	400.5	394.6	387.8	383.1	379.2	379.2	367.6	350.9	330.8	308.8
22.5°	400.5	402.3	398.2	389.0	387.8	388.3	389.5	380.3	363.1	344.1	321.0
25°	404.4	406.8	403.9	393.0	391.8	395.9	397.1	393.0	377.4	358.5	334.8
27.5°	412.5	414.8	412.5	398.8	397.1	401.1	402.3	404.4	393.0	372.2	349.3
30°	428.8	429.3	424.1	406.8	403.3	408.5	410.3	416.6	407.4	385.6	363.1
32.5°	456.9	451.2	435.6	412.5	409.6	415.5	417.2	424.1	420.6	398.2	377.4
35°	514.5	484.5	448.9	420.6	417.7	423.6	425.7	435.6	437.4	416.1	395.3
37.5°	514.0	486.9	480.0	436.1	432.2	436.1	439.0	451.2	458.0	439.6	421.1
40°	550.3	538.8	538.8	465.6	452.3	458.0	461.0	473.0	485.2	470.7	451.8
42.5°	664.3	656.9	648.8	522.0	480.6	496.8	498.4	505.8	520.3	515.6	493.2
45°	791.6	784.8	753.7	617.7	528.9	531.8	535.8	548.0	568.6	577.3	550.8
47.5°	891.4	884.6	857.9	732.9	604.4	579.0	579.0	602.8	635.0	656.9	631.5
50°	971.4	963.4	947.3	855.6	728.3	647.0	643.6	671.3	719.2	753.0	735.8
52.5°	1049.3	1025.7	1015.9	982.4	868.3	745.7	736.4	756.0	822.3	864.3	849.8
55°	1101.1	1097.6	1087.3	1098.7	1015.3	865.4	857.4	861.5	944.4	972.7	954.8
57.5°	1149.6	1148.9	1172.0	1225.6	1175.4	1002.6	989.9	983.6	1062.5	1055.6	1071.1
60°	1209.5	1199.1	1252.6	1329.3	1322.3	1136.3	1121.9	1109.1	1153.0	1133.4	1210.6
62.5°	1212.4	1209.5	1318.4	1428.5	1468.2	1272.3	1255.6	1210.0	1231.9	1209.5	1343.8
65°	1102.3	1116.7	1346.0	1480.9	1590.3	1391.6	1371.4	1300.4	1302.3	1287.2	1500.3
67.5°	1077.4	1085.1	1269.9	1537.3	1678.5	1511.9	1493.0	1404.8	1384.0	1385.1	1593.2
70°	1015.9	1027.3	1175.4	1533.2	1748.2	1672.7	1653.7	1558.0	1508.0	1452.0	1521.8
72.5°	776.1	795.7	990.6	1344.3	1729.1	1883.0	1877.8	1752.2	1557.5	1333.4	1151.3
75°	262.8	262.1	520.3	902.8	1553.3	1947.5	1957.9	1728.0	1358.6	919.7	571.6
77.5°	56.5	57.0	107.2	365.9	1032.0	1563.8	1603.6	1303.4	876.3	409.6	130.9
80°	27.7	28.2	44.3	96.7	412.5	876.9	939.2	670.1	323.7	81.8	21.9
82.5°	13.8	14.5	23.0	51.3	152.7	311.7	333.0	246.7	92.7	46.2	11.0
85°	5.2	5.2	11.5	30.5	69.7	73.2	89.9	71.4	55.9	37.5	2.9
87.5°	1.2	1.2	6.4	15.0	31.1	23.0	23.0	21.9	34.0	25.3	1.2
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°	260.5	260.5	260.5	260.5	260.5	260.5	260.5	260.5	260.5	260.5	260.5
2.5°	259.9	257.5	253.5	249.5	246.7	243.1	241.5	239.7	239.0	238.5	239.7
5°	256.9	253.5	246.0	239.7	234.0	229.3	225.8	222.4	220.7	219.5	220.2
7.5°	256.9	251.9	240.8	231.0	221.8	212.0	202.3	194.8	189.1	185.5	186.0
10°	259.9	253.0	238.5	225.2	208.0	187.2	165.9	149.7	138.9	132.5	132.5
12.5°	266.2	256.9	239.0	218.4	189.1	152.7	120.5	100.8	92.7	88.2	88.8
15°	274.8	263.9	242.1	209.1	162.6	113.5	84.1	71.4	71.4	72.7	73.2
17.5°	284.7	272.5	244.2	195.3	128.5	81.2	66.3	65.0	66.8	69.7	69.7
20°	294.5	281.2	245.4	173.5	96.2	64.6	62.8	62.8	64.0	66.8	67.5
22.5°	306.5	292.0	244.2	146.3	72.0	61.1	60.5	60.5	60.5	64.0	64.0
25°	319.2	304.9	239.7	117.6	61.1	58.7	58.2	57.6	57.6	60.5	61.1
27.5°	333.6	318.1	228.8	89.9	57.6	56.5	55.9	54.7	54.7	57.0	57.0
30°	348.1	333.0	212.0	68.0	54.7	54.2	53.0	51.8	50.8	53.0	53.0
32.5°	363.5	348.6	190.1	54.2	50.8	50.8	50.1	48.4	47.3	48.4	49.0
35°	384.4	366.5	165.4	47.3	45.5	45.5	45.5	44.9	42.6	43.7	43.7
37.5°	412.1	391.2	136.5	43.7	41.5	40.3	40.3	40.3	38.5	39.2	39.2
40°	447.1	420.0	109.0	41.0	38.5	35.8	34.6	35.2	34.0	34.0	33.4
42.5°	495.0	451.2	81.8	38.5	36.3	32.2	30.0	29.4	28.2	27.7	27.7
45°	563.5	489.1	58.7	36.3	34.6	28.2	26.0	24.3	21.3	19.7	19.7
47.5°	652.3	532.4	43.7	34.0	32.9	24.8	21.9	18.4	14.5	13.2	13.2
50°	760.5	580.8	36.9	30.5	30.0	21.9	17.2	12.0	8.1	6.8	7.5
52.5°	866.1	626.3	32.9	27.0	26.5	19.0	12.7	6.4	3.5	3.5	3.5
55°	954.8	658.5	30.0	24.3	23.0	15.0	6.8	2.9	1.7	1.7	1.7
57.5°	1034.8	677.1	27.0	21.3	18.4	10.4	2.9	1.2	1.2	0.5	0.5
60°	1108.0	688.0	23.6	18.4	14.5	5.7	1.2	0.5	0.5	0.0	0.0
62.5°	1180.1	696.0	20.1	15.0	11.0	2.2	0.5	0.5	0.0	0.0	0.0
65°	1234.8	693.1	16.1	12.0	6.8	1.2	0.5	0.0	0.0	0.0	0.0
67.5°	1233.1	654.0	12.0	9.3	3.5	0.5	0.0	0.0	0.0	0.0	0.0
70°	1102.8	550.8	8.1	5.7	1.2	0.5	0.0	0.0	0.0	0.0	0.0
72.5°	782.5	353.3	5.2	3.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	344.6	107.2	2.9	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	67.5	24.8	1.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	16.1	2.9	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	6.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	1.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.2	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)