

Scaled data based on original data using
LM-31-95 IESNA Approved Method for Photometric Testing of Roadway Luminaires
Using Incandescent Filament and High Intensity Discharge Lamps

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: STREETWORKS

Report Number: 766413

Luminaire Tested: **LXF70SXX3H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: 766413
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: LXF70SXX3H
Description: 70W HPS TYPE III LEXINGTON POST TOP
Light Source: 70W HPS CL E-23.5
Ballast/Driver: -

Summary

Lumens per Lamp: 6300 (1 lamp)
Luminaire Lumens: 3074.4 lumens
Efficiency: 48.8%
Efficacy: 20.5 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.25' x L: 1.25' x H: 1.25')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B1 - U2 - G1

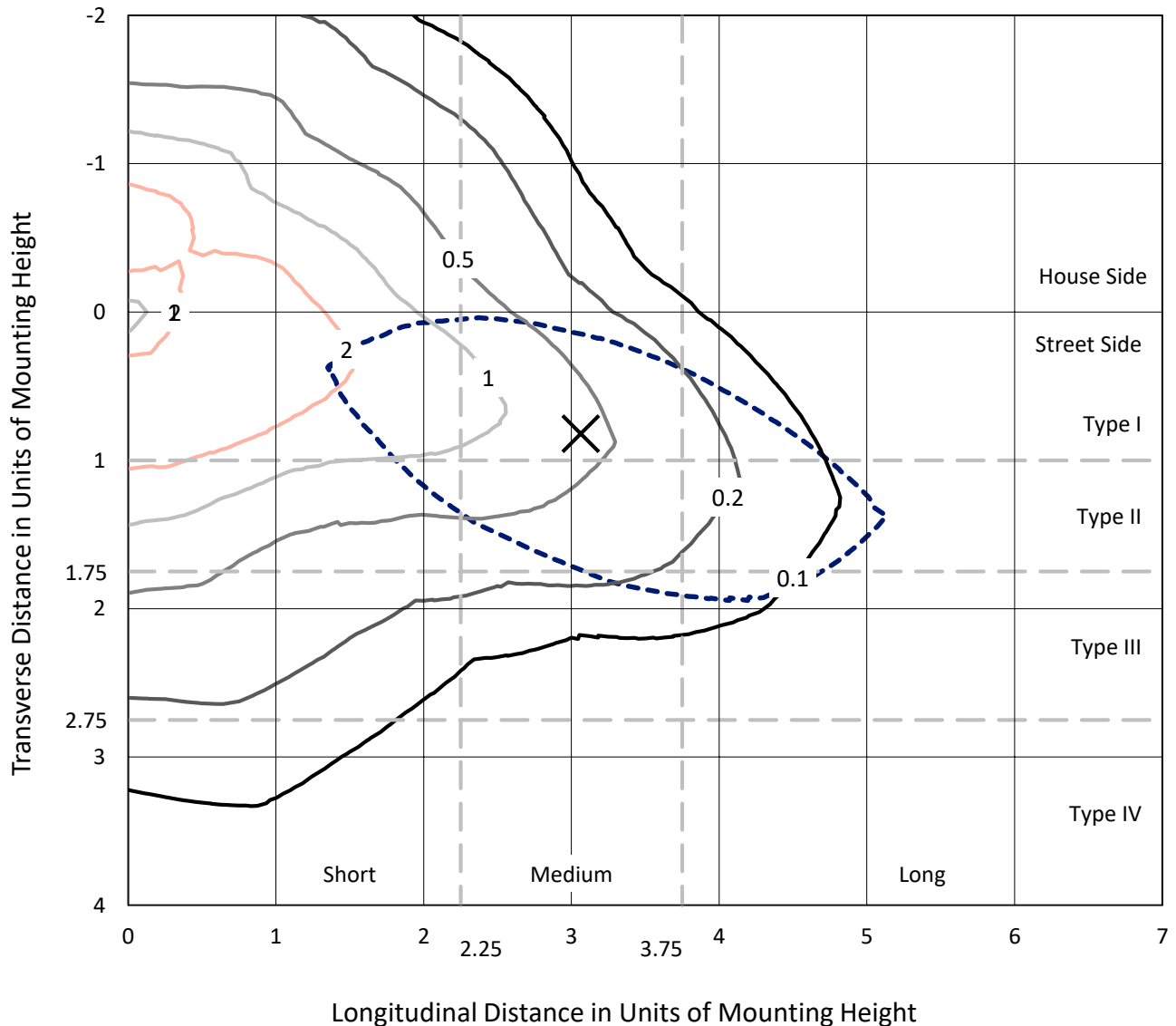
Input Watts (W): 150
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

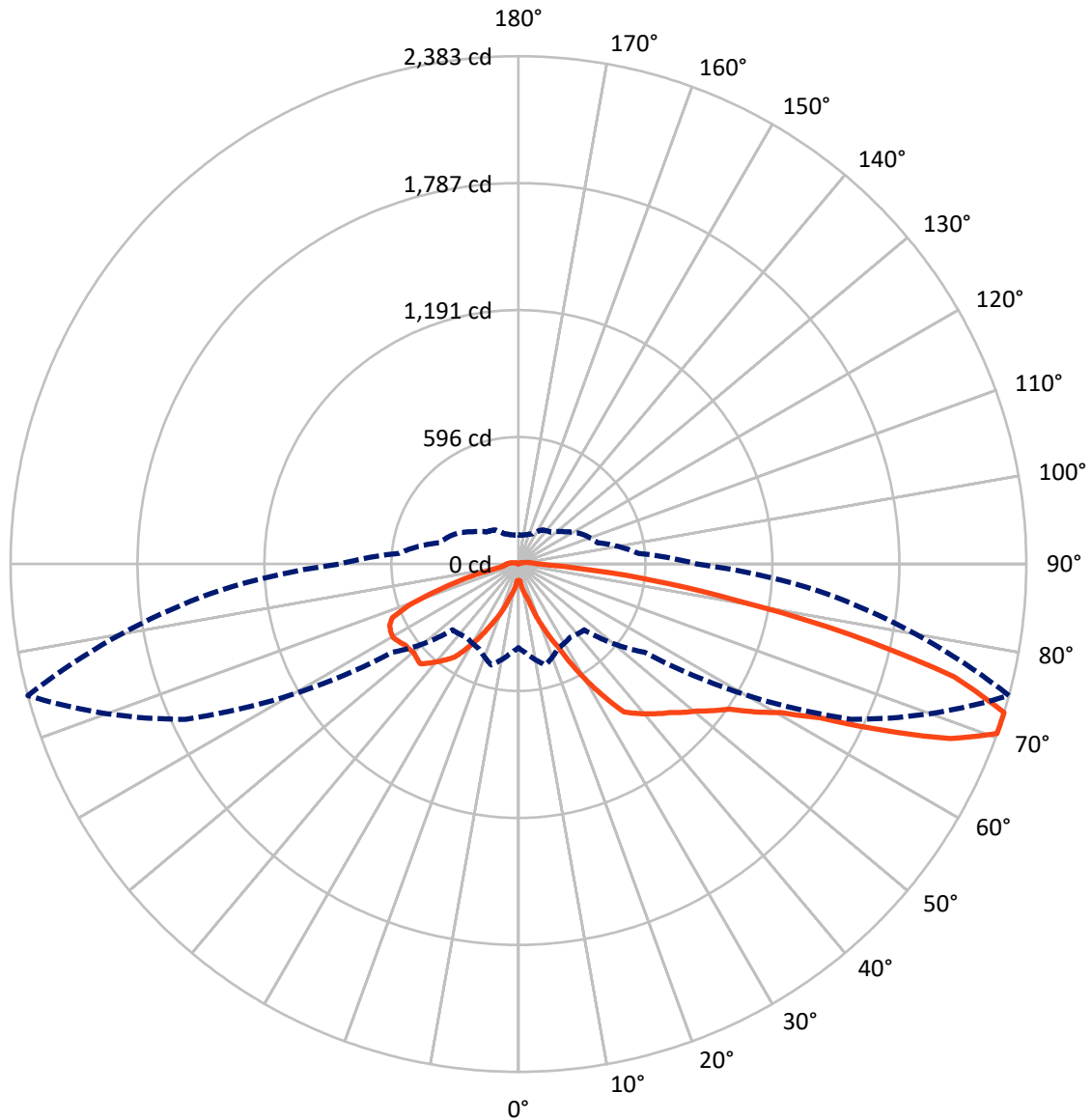
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.9 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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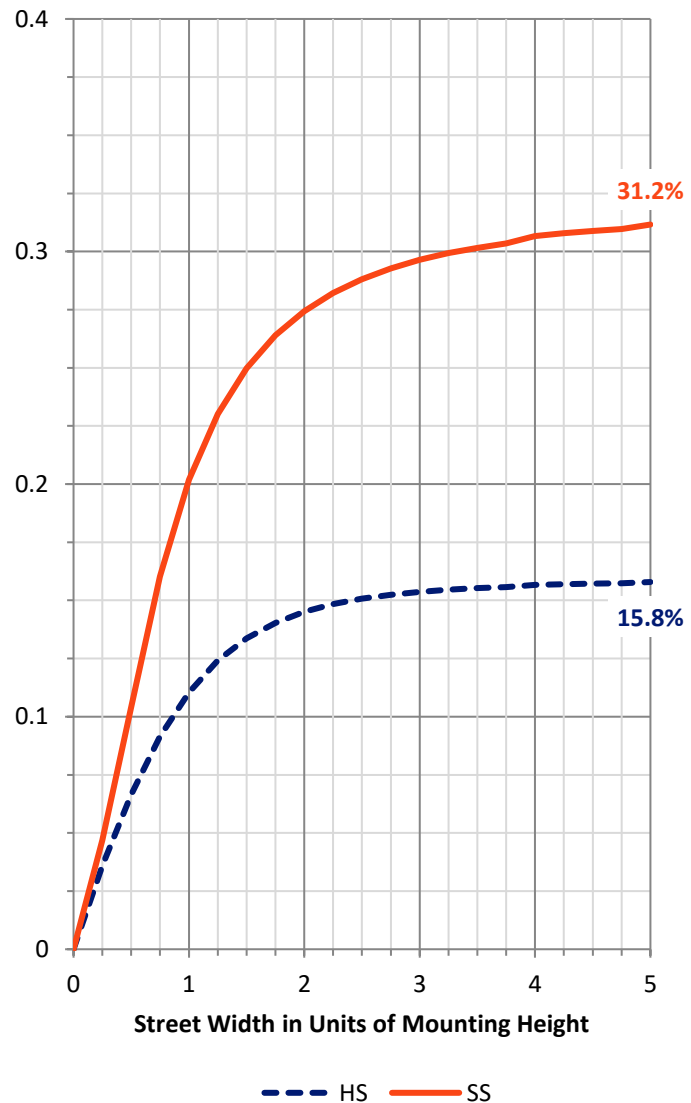
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1007.0	36.7	1043.7
	% Lamp	16.0	0.6	16.6
Street Side	Lumens	1985.1	45.5	2030.6
	% Lamp	31.5	0.7	32.2
Total	Lumens	2992.1	82.3	3074.4
	% Lamp	47.5	1.3	48.8

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	9.5	0.3	0.2
10°-20°	58.5	1.9	0.9
20°-30°	185.5	6.0	2.9
30°-40°	368.0	12.0	5.8
40°-50°	498.0	16.2	7.9
50°-60°	559.7	18.2	8.9
60°-70°	659.6	21.5	10.5
70°-80°	504.3	16.4	8.0
80°-90°	130.5	4.2	2.1
90°-100°	44.2	1.4	0.7
100°-110°	25.0	0.8	0.4
110°-120°	12.2	0.4	0.2
120°-130°	3.3	0.1	0.1
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	2992.1	97.3	47.5
0°-180°	3074.4	100.0	48.8

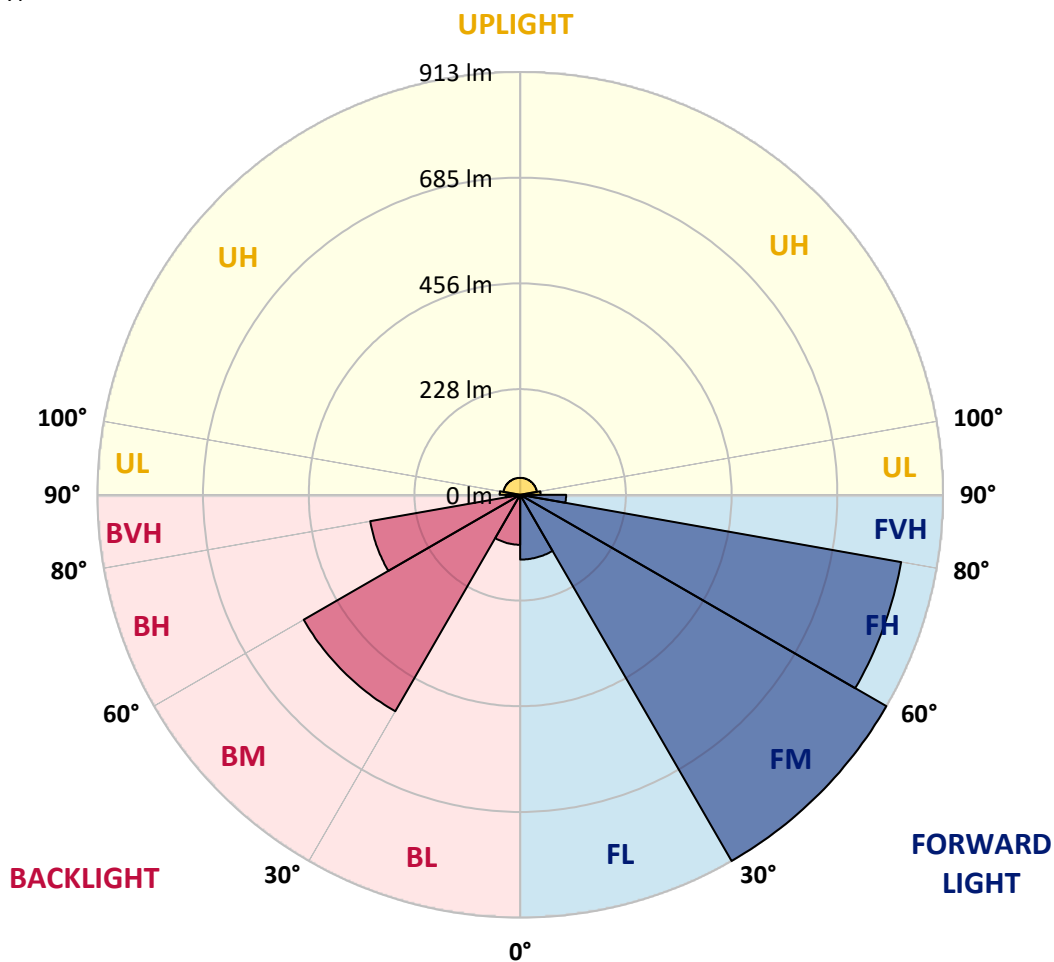


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	139.8	2.2			
FM (30°-60°)	912.9	14.5			
FH (60°-80°)	835.2	13.3			G1/1800
FVH (80°-90°)	99.2	1.6			G1/100
BL (0°-30°)	107.9	1.7	B0/110		
BM (30°-60°)	539.7	8.6	B1/1000		
BH (60°-80°)	328.7	5.2	B1/500		G1/500
BVH (80°-90°)	31.3	0.5			G1/100
UL (90°-100°)	44.2	0.7		U2/50	
UH (100°-180°)	36.7	0.6		U2/50	
Trapped Light	3225.6	51.2			

BUG Rating: B1-U2-G1
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
5°	78.0	78.0	78.8	78.0	78.8	78.8	78.0	78.8	81.1	80.3	81.9
15°	177.8	185.2	175.1	171.2	183.7	172.4	182.5	184.1	173.9	177.1	177.8
25°	482.0	498.4	477.4	445.4	421.2	428.6	443.0	446.9	427.4	398.6	376.0
35°	895.4	888.8	863.5	806.5	786.2	821.3	905.6	929.0	853.3	742.6	686.4
45°	631.4	608.0	676.6	680.9	756.6	858.0	1009.7	1066.6	995.3	867.4	809.6
50°	566.3	552.6	569.8	562.0	633.0	753.9	911.4	1049.5	1085.0	965.2	870.9
55°	536.6	515.2	525.3	500.4	540.5	623.6	814.7	1056.9	1201.6	1061.6	949.3
60°	490.2	475.4	486.3	454.4	468.4	546.0	805.7	1191.8	1415.3	1184.4	975.8
62.5°	491.4	478.9	497.2	453.2	451.6	557.3	844.4	1279.6	1588.9	1313.5	1060.0
65°	472.7	461.8	502.3	470.7	469.6	557.3	862.3	1440.7	1880.2	1439.1	1061.2
67.5°	439.5	443.0	492.6	473.8	466.4	540.2	851.0	1628.2	2186.3	1553.4	1108.0
70°	427.4	437.2	494.5	467.6	454.7	500.4	827.2	1766.3	2382.1	1515.9	1029.6
72.5°	393.1	420.0	491.0	438.4	421.2	437.2	723.4	1723.0	2382.9	1402.0	836.6
75°	310.4	357.6	436.4	383.0	349.8	344.0	597.5	1602.9	2111.1	1120.5	686.4
77.5°	239.1	253.5	335.8	289.0	271.0	268.3	464.1	1219.1	1592.8	778.1	409.1
80°	162.2	179.4	231.7	212.2	211.0	194.2	311.6	902.8	1036.2	486.7	282.4
82.5°	97.1	112.3	165.8	142.0	152.9	138.1	251.2	492.2	630.2	308.5	191.1
85°	44.8	54.6	71.0	83.5	103.0	88.9	135.7	309.3	310.8	167.7	122.1
87.5°	34.3	35.5	46.0	57.3	69.8	73.3	97.9	133.4	147.0	99.1	87.0
90°	28.5	30.0	36.7	49.1	59.3	62.0	70.6	84.6	87.0	81.1	73.3
95°	21.4	23.0	29.6	37.8	44.8	46.8	48.0	52.6	58.1	58.1	54.6
105°	14.0	14.0	19.1	21.4	22.6	23.0	23.0	25.0	23.0	21.8	21.4
115°	19.1	17.2	17.2	14.8	16.0	16.0	14.8	16.0	14.8	14.8	15.2
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0	76.0
5°	81.9	81.9	84.6	84.6	86.6	89.3	91.6	90.5	90.5	91.3
15°	177.8	162.2	156.8	156.4	163.0	171.6	184.1	193.0	207.9	209.4
25°	357.6	316.3	284.7	272.2	282.0	312.0	366.6	404.4	445.4	453.6
35°	633.8	530.0	423.9	356.5	341.6	385.3	434.5	463.7	459.0	482.0
45°	756.2	656.8	508.6	407.6	364.3	407.6	425.9	413.8	422.4	445.4
50°	776.9	643.5	498.0	409.1	364.3	419.2	411.4	389.2	388.0	401.3
55°	824.5	654.4	510.5	411.4	380.2	443.0	395.1	337.0	322.5	326.8
60°	840.4	681.7	551.5	444.6	381.8	420.0	360.0	301.9	285.5	283.1
62.5°	847.9	678.2	566.3	436.4	365.8	404.0	349.8	293.3	273.4	277.3
65°	830.7	669.2	571.0	432.9	347.5	385.3	329.9	260.5	253.9	252.3
67.5°	825.6	643.5	539.0	398.6	322.5	330.3	273.4	230.5	225.0	229.7
70°	693.4	538.2	454.4	349.8	260.1	277.3	216.1	201.2	186.0	180.2
72.5°	565.5	384.9	331.5	263.6	212.6	195.0	156.4	141.6	135.7	136.1
75°	400.9	274.2	227.4	207.1	149.8	145.1	109.6	107.6	88.9	78.0
77.5°	264.8	157.6	163.0	143.9	111.9	85.8	66.3	62.0	57.3	55.8
80°	147.0	85.8	88.9	100.6	68.6	56.9	49.1	49.9	45.6	42.5
82.5°	120.9	74.1	71.0	67.5	56.2	48.8	42.5	41.3	40.2	39.0
85°	93.6	65.9	63.2	59.7	49.1	43.3	39.0	37.8	35.5	35.5
87.5°	76.4	60.8	55.8	53.4	44.8	40.2	35.1	34.3	33.2	32.0
90°	68.6	55.0	51.5	48.0	39.8	35.1	32.0	32.0	30.8	30.8
95°	53.4	44.8	41.0	37.8	31.2	27.7	27.3	27.3	25.0	25.0
105°	21.4	21.8	23.0	21.4	18.3	17.9	16.8	15.2	13.6	12.9
115°	15.2	13.6	14.0	14.8	13.6	12.9	11.7	11.7	11.7	11.7
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)