

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: McGRAW-EDISON

Report Number: P832820

Luminaire Tested: **TTN-D0-735-U-RW-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P832820
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TTN-D0-735-U-RW-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND RECTANGULAR DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1666.8 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B1 - U4 - G1

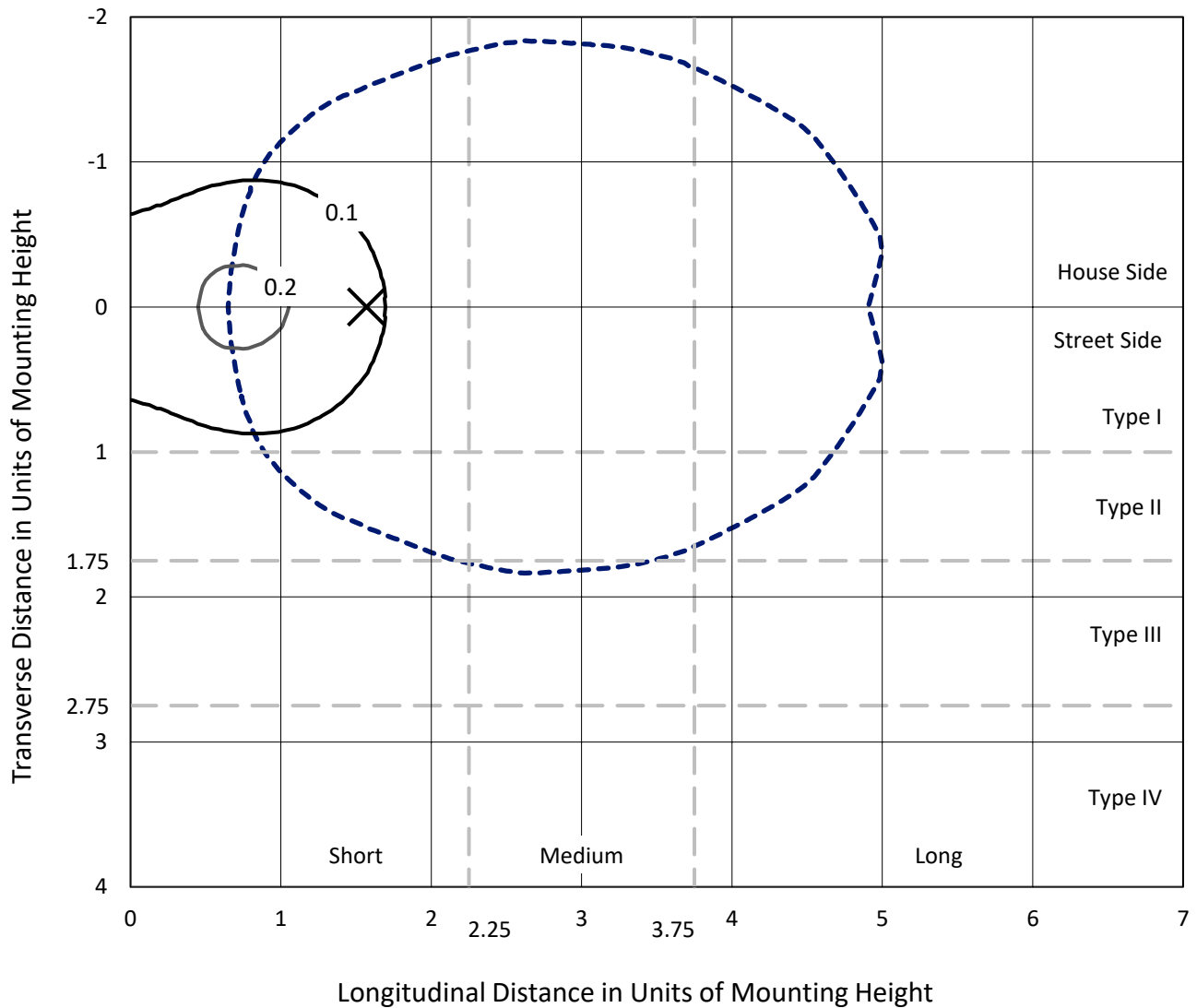
Input Watts (W): 15.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

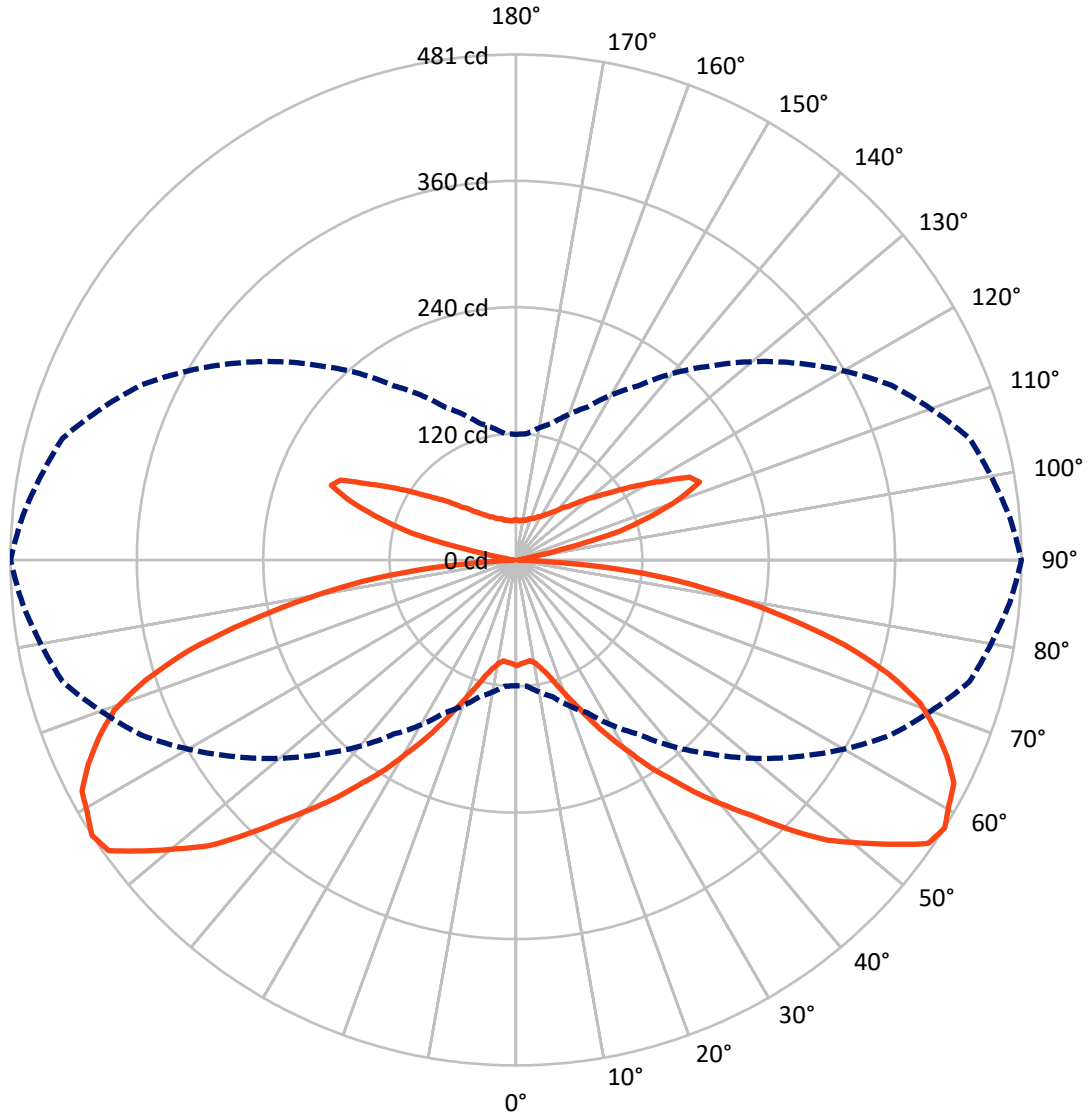
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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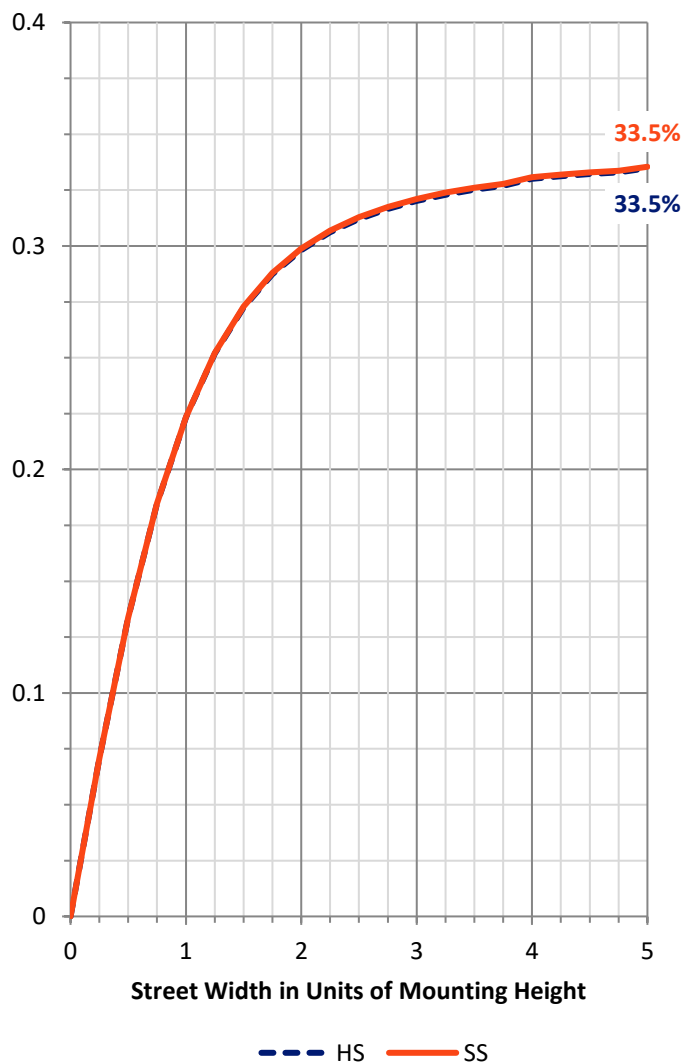
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	561.9	271.5	833.4
	% Fixture	33.7	16.3	50.0
Street Side	Lumens	561.9	271.5	833.4
	% Fixture	33.7	16.3	50.0
Total	Lumens	1123.7	543.0	1666.8
	% Fixture	67.4	32.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.4	0.6
10°-20°	30.1	1.8
20°-30°	62.8	3.8
30°-40°	112.7	6.8
40°-50°	180.1	10.8
50°-60°	246.5	14.8
60°-70°	254.3	15.3
70°-80°	180.8	10.8
80°-90°	47.0	2.8
90°-100°	12.1	0.7
100°-110°	123.2	7.4
110°-120°	180.1	10.8
120°-130°	104.5	6.3
130°-140°	55.4	3.3
140°-150°	32.9	2.0
150°-160°	20.2	1.2
160°-170°	11.0	0.7
170°-180°	3.6	0.2
0°-90°	1123.7	67.4
0°-180°	1666.8	100.0

Coefficient of Utilization



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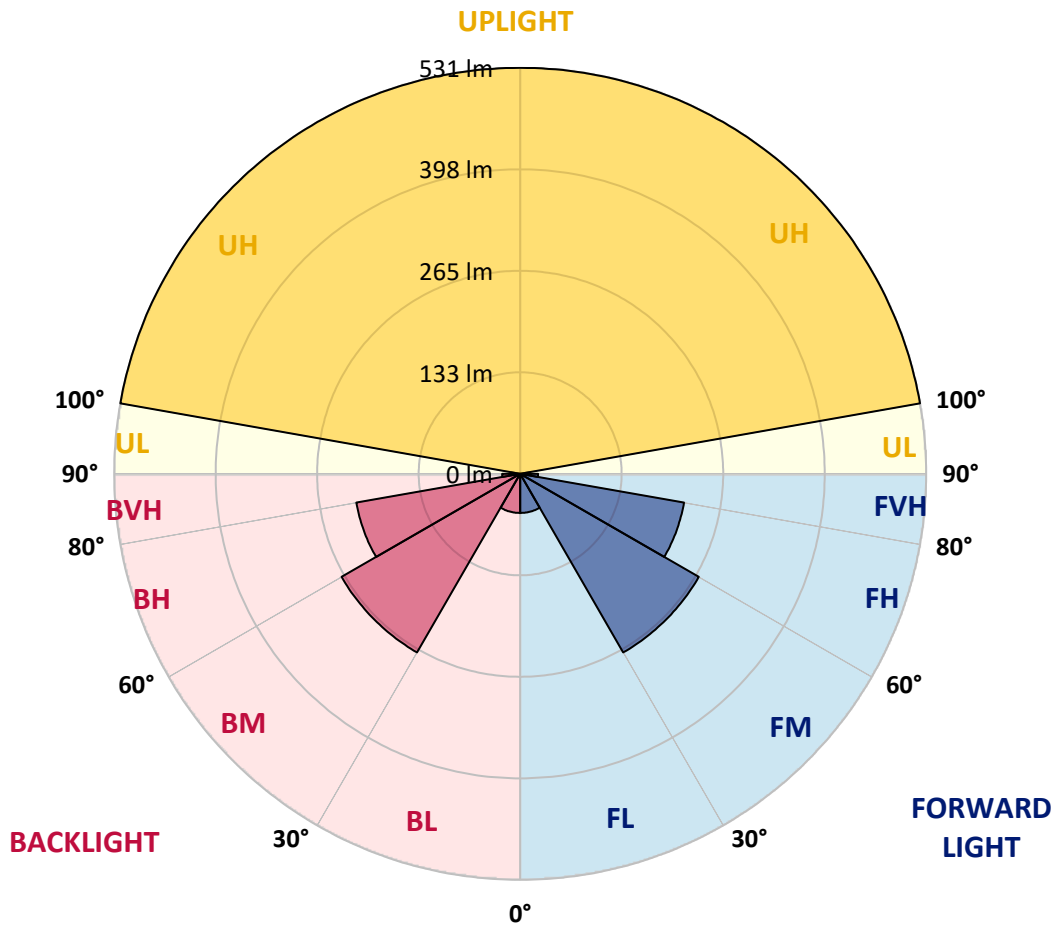
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	51.2	3.1			
FM (30°-60°)	269.6	16.2			
FH (60°-80°)	217.5	13.1			G0/660
FVH (80°-90°)	23.5	1.4			G1/100
BL (0°-30°)	51.2	3.1	B0/110		
BM (30°-60°)	269.6	16.2	B1/1000		
BH (60°-80°)	217.5	13.1	B1/500		G1/500
BVH (80°-90°)	23.5	1.4			G1/100
UL (90°-100°)	12.1	0.7		U2/50	
UH (100°-180°)	530.9	31.9		U4/1000	

BUG Rating: B1-U4-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.5
2.5°	100.5	100.5	99.5	99.5	99.5	98.6	98.6	98.6	98.6	97.6	98.6
5°	100.5	100.5	100.5	100.5	99.5	98.6	98.6	98.6	97.6	97.6	97.6
7.5°	99.5	99.5	99.5	99.5	98.6	97.6	97.6	97.6	96.7	96.7	96.7
10°	98.6	99.5	98.6	98.6	97.6	97.6	98.6	98.6	99.5	99.5	99.5
12.5°	97.6	97.6	97.6	98.6	98.6	99.5	101.4	103.3	104.2	105.2	105.2
15°	97.6	97.6	98.6	99.5	101.4	103.3	106.1	109.0	110.9	112.8	112.8
17.5°	97.6	97.6	98.6	101.4	104.2	108.0	112.8	116.6	120.4	123.2	124.1
20°	97.6	97.6	99.5	103.3	109.0	114.7	121.3	127.0	132.7	137.4	137.4
22.5°	98.6	99.5	101.4	106.1	114.7	123.2	131.7	140.3	146.9	152.6	152.6
25°	100.5	100.5	103.3	110.9	121.3	132.7	145.0	155.4	164.0	171.5	171.5
27.5°	101.4	102.4	106.1	115.6	128.9	143.1	160.2	172.5	183.9	190.5	191.4
30°	103.3	104.2	109.9	119.4	135.5	153.5	173.4	190.5	202.8	209.4	211.3
32.5°	104.2	105.2	112.8	124.1	142.2	163.0	185.8	207.5	224.6	232.2	235.0
35°	107.1	108.0	115.6	128.9	149.7	173.4	200.0	225.6	245.5	254.9	256.8
37.5°	109.9	110.9	118.5	133.6	157.3	184.8	215.1	244.5	267.3	278.6	282.4
40°	111.8	112.8	121.3	139.3	165.8	197.1	232.2	264.4	290.0	304.2	307.1
42.5°	114.7	115.6	125.1	144.1	173.4	209.4	250.2	286.2	313.7	329.8	333.6
45°	117.5	118.5	128.9	149.7	182.0	222.7	268.2	311.8	343.1	362.0	365.8
47.5°	120.4	121.3	132.7	155.4	190.5	236.0	287.2	334.5	372.4	390.5	398.0
50°	121.3	123.2	134.6	159.2	196.2	247.4	303.3	357.3	397.1	420.8	422.7
52.5°	122.3	124.1	136.5	162.1	200.9	255.9	316.5	376.2	422.7	451.1	449.2
55°	123.2	123.2	136.5	162.1	202.8	261.6	326.0	388.6	439.7	462.5	475.7
57.5°	119.4	120.4	134.6	160.2	201.9	260.6	326.0	393.3	446.4	471.0	480.5
60°	114.7	116.6	129.8	155.4	198.1	257.8	324.1	391.4	449.2	475.7	472.9
62.5°	108.0	111.8	123.2	148.8	192.4	251.1	321.3	386.7	442.6	470.1	467.2
65°	100.5	104.2	114.7	142.2	180.1	235.0	306.1	377.2	424.6	455.8	450.2
67.5°	92.9	95.7	106.1	130.8	165.8	218.0	286.2	356.3	399.0	433.1	430.3
70°	84.3	85.3	95.7	117.5	151.6	200.9	267.3	327.0	376.2	401.8	407.5
72.5°	73.9	73.9	84.3	103.3	134.6	178.2	241.7	293.8	340.2	362.0	370.6
75°	60.7	61.6	70.1	87.2	112.8	152.6	205.7	258.7	297.6	320.3	323.2
77.5°	47.4	48.3	55.0	69.2	91.0	123.2	169.6	211.3	248.3	268.2	262.5
80°	34.1	35.1	39.8	50.2	67.3	91.9	130.8	167.7	194.3	210.4	202.8
82.5°	20.8	21.8	24.6	31.3	42.6	59.7	89.1	116.6	137.4	150.7	147.8
85°	10.4	10.4	12.3	14.2	18.0	26.5	42.6	58.8	74.9	84.3	81.5
87.5°	1.9	2.8	2.8	2.8	2.8	1.9	2.8	2.8	2.8	4.7	1.9
90°	4.6	4.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	4.6	4.6
92.5°	4.6	4.6	4.6	6.5	7.4	6.5	7.4	5.6	5.6	4.6	4.6
95°	5.6	5.6	6.5	8.4	10.2	11.1	11.1	6.5	6.5	5.6	5.6
97.5°	7.4	8.4	8.4	10.2	16.7	30.7	18.6	9.3	9.3	8.4	7.4
100°	12.1	13.0	13.0	23.2	49.2	66.0	47.4	24.2	17.7	13.0	13.0
102.5°	39.0	40.9	50.2	75.3	111.5	101.3	85.5	80.8	55.7	44.6	42.7
105°	99.4	98.5	105.9	125.4	156.1	153.3	141.2	128.2	110.6	102.2	102.2
107.5°	131.0	131.0	137.5	154.2	177.4	207.2	210.0	166.3	145.9	136.6	135.6
110°	147.7	147.7	153.3	167.2	197.9	239.7	237.8	205.3	180.2	168.2	166.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	151.4	152.4	159.8	181.2	214.6	233.2	224.8	211.8	200.7	191.4	189.5
115°	157.0	157.0	165.4	185.8	204.4	211.8	202.5	192.3	184.9	181.2	183.0
117.5°	155.1	157.9	159.8	170.9	183.0	188.6	183.9	170.0	164.4	162.6	159.8
120°	144.0	144.0	145.9	151.4	157.9	160.7	158.9	149.6	144.9	144.0	142.1
122.5°	128.2	129.1	128.2	131.0	135.6	138.4	136.6	129.1	127.3	127.3	125.4
125°	112.4	112.4	111.5	113.3	116.1	115.2	116.1	112.4	111.5	111.5	110.6
127.5°	101.3	100.3	98.5	99.4	100.3	100.3	101.3	97.5	98.5	99.4	98.5
130°	90.1	90.1	88.3	88.3	88.3	86.4	88.3	86.4	87.3	88.3	89.2
132.5°	79.9	79.9	77.1	76.2	76.2	76.2	77.1	76.2	78.0	79.9	79.9
135°	71.5	71.5	68.7	69.7	69.7	68.7	69.7	68.7	70.6	71.5	71.5
137.5°	65.0	65.0	63.2	63.2	63.2	62.2	63.2	63.2	64.1	66.0	66.9
140°	59.5	59.5	58.5	58.5	57.6	58.5	58.5	58.5	59.5	60.4	60.4
142.5°	56.7	55.7	54.8	53.9	54.8	54.8	54.8	53.9	54.8	56.7	56.7
145°	52.0	52.0	51.1	51.1	51.1	52.0	51.1	51.1	52.0	52.0	53.0
147.5°	49.2	49.2	48.3	49.2	49.2	49.2	49.2	48.3	49.2	49.2	50.2
150°	48.3	47.4	46.5	47.4	47.4	46.5	46.5	46.5	46.5	47.4	47.4
152.5°	45.5	45.5	44.6	45.5	44.6	44.6	44.6	44.6	44.6	45.5	46.5
155°	43.7	43.7	42.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7
157.5°	41.8	42.7	41.8	41.8	41.8	41.8	41.8	41.8	41.8	42.7	42.7
160°	40.9	40.9	40.9	40.9	39.9	39.9	39.9	40.9	40.9	40.9	41.8
162.5°	39.9	39.9	39.9	39.9	39.0	39.0	39.0	39.0	39.9	39.9	40.9
165°	39.9	39.0	39.0	39.0	38.1	38.1	38.1	38.1	39.0	39.9	39.0
167.5°	38.1	38.1	38.1	38.1	38.1	37.2	37.2	38.1	38.1	38.1	39.0
170°	38.1	38.1	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2	38.1
172.5°	38.1	38.1	38.1	38.1	37.2	37.2	37.2	37.2	37.2	38.1	38.1
175°	38.1	38.1	38.1	38.1	37.2	37.2	37.2	38.1	38.1	38.1	37.2
177.5°	38.1	38.1	38.1	38.1	37.2	38.1	38.1	38.1	38.1	38.1	38.1
180°	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1

(END OF REPORT)