

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: P833330

Luminaire Tested: **TTN-D1-830-U-RW-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833330
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-D1-830-U-RW-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND RECTANGULAR DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3471.8 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B2 - U4 - G2

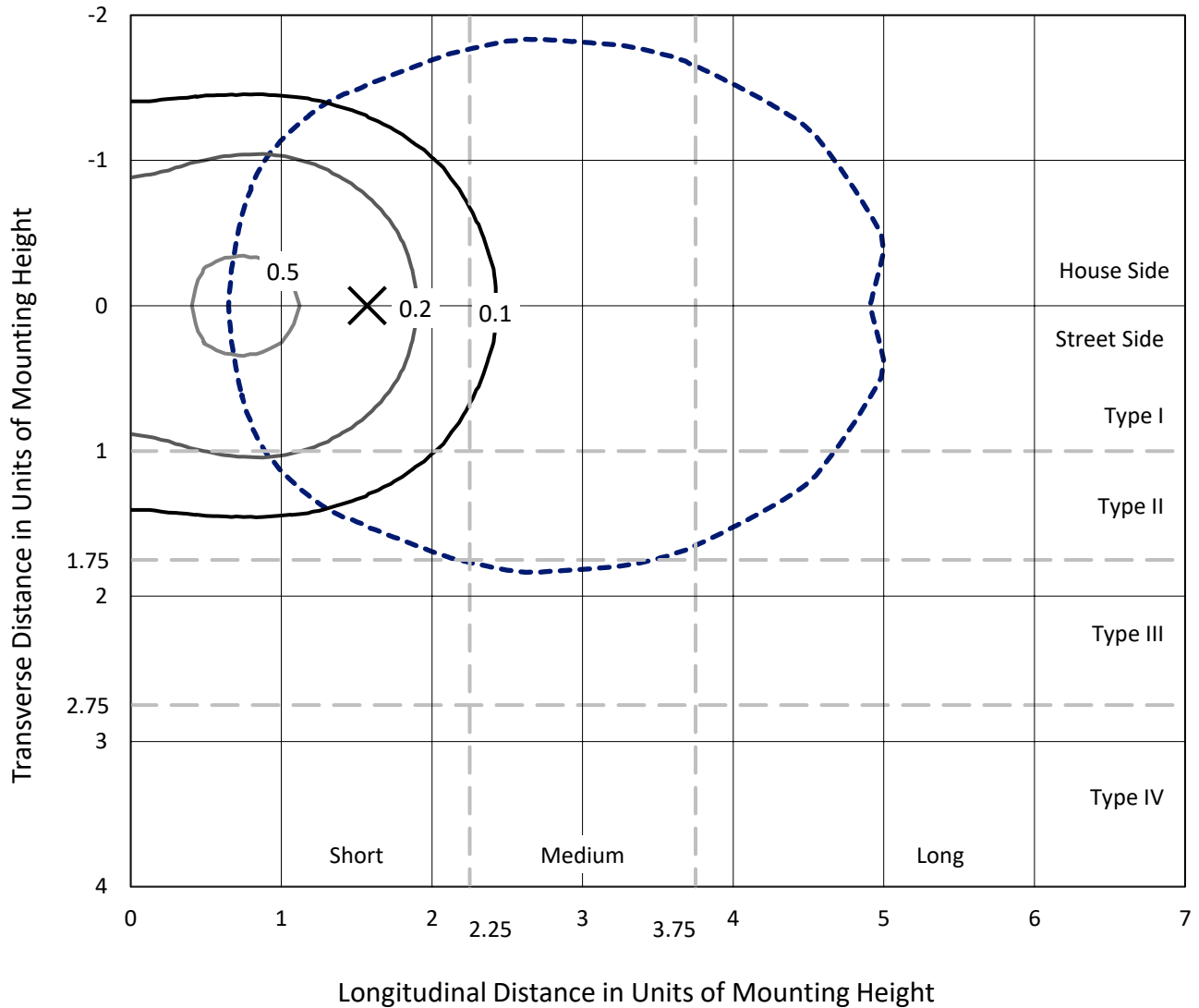
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

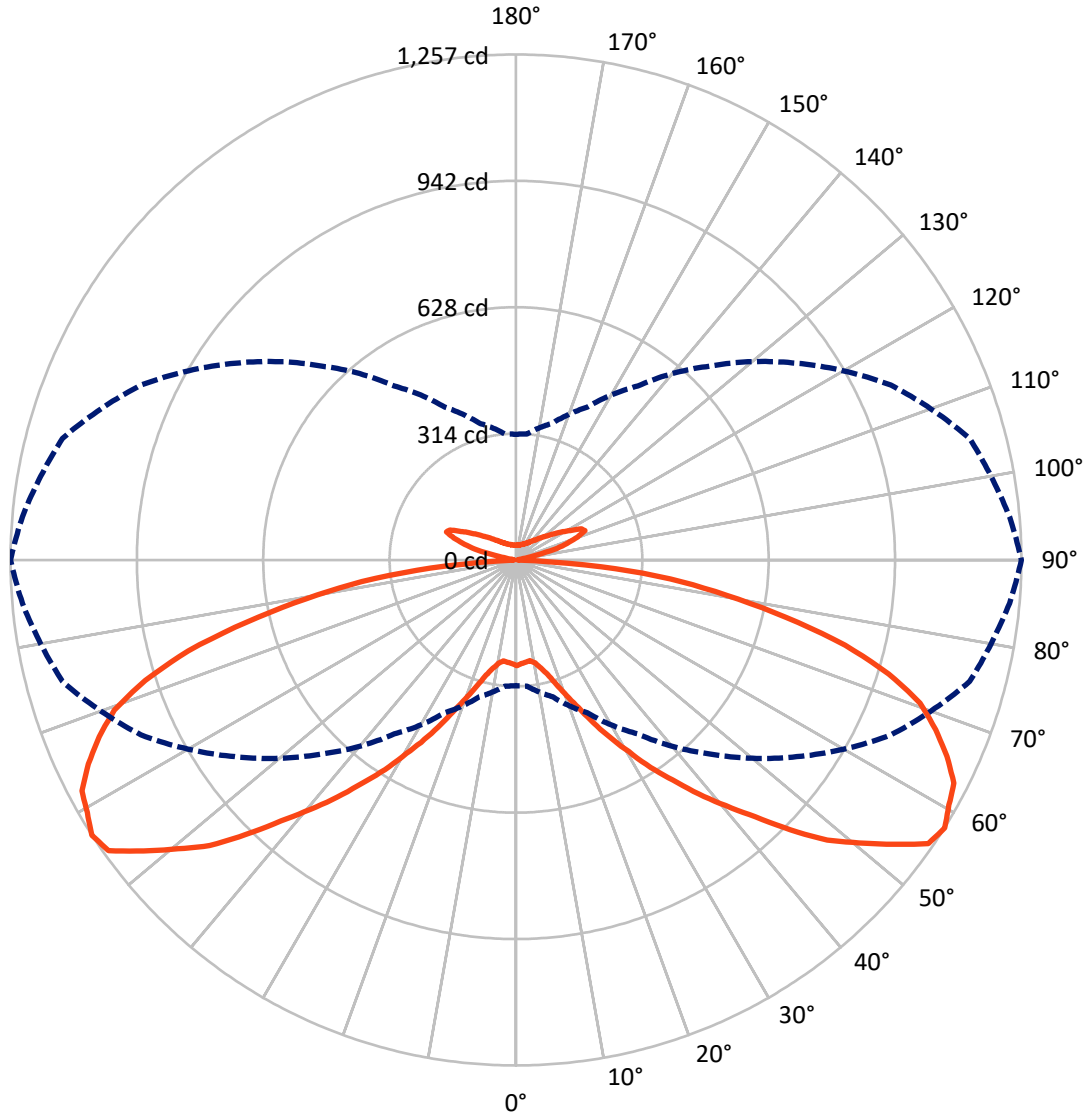
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.6 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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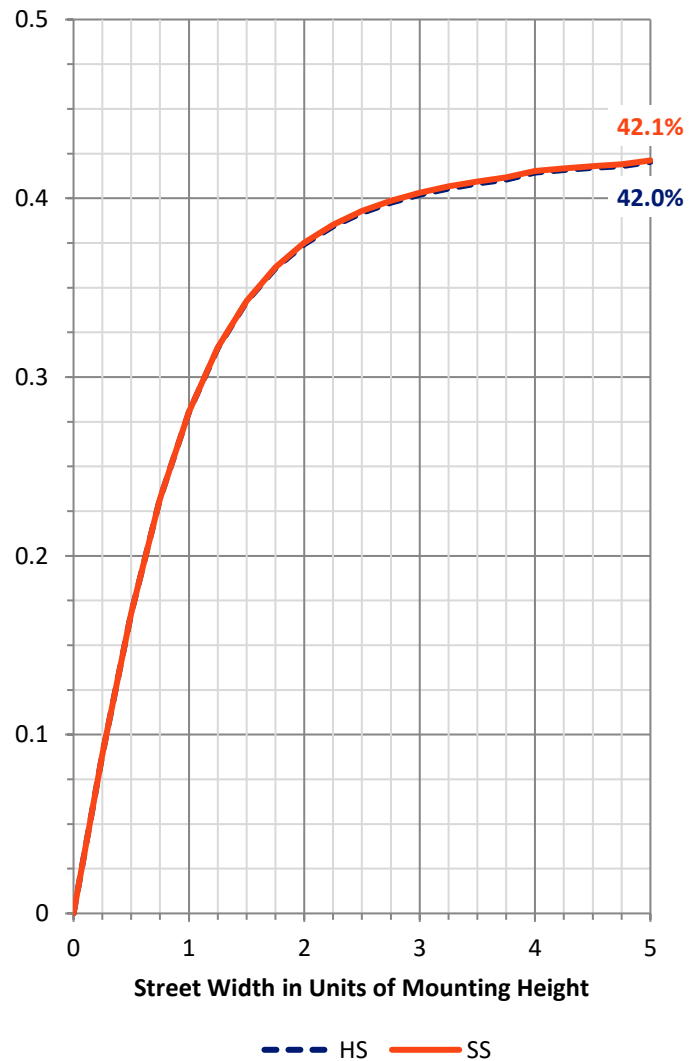
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1468.9	267.0	1735.9
	% Fixture	42.3	7.7	50.0
Street Side	Lumens	1468.9	267.0	1735.9
	% Fixture	42.3	7.7	50.0
Total	Lumens	2937.7	534.0	3471.8
	% Fixture	84.6	15.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.6	0.7
10°-20°	78.8	2.3
20°-30°	164.3	4.7
30°-40°	294.7	8.5
40°-50°	470.9	13.6
50°-60°	644.7	18.6
60°-70°	665.0	19.2
70°-80°	472.9	13.6
80°-90°	121.8	3.5
90°-100°	11.9	0.3
100°-110°	121.1	3.5
110°-120°	177.1	5.1
120°-130°	102.8	3.0
130°-140°	54.4	1.6
140°-150°	32.3	0.9
150°-160°	19.9	0.6
160°-170°	10.9	0.3
170°-180°	3.5	0.1
0°-90°	2937.7	84.6
0°-180°	3471.8	100.0

Coefficient of Utilization



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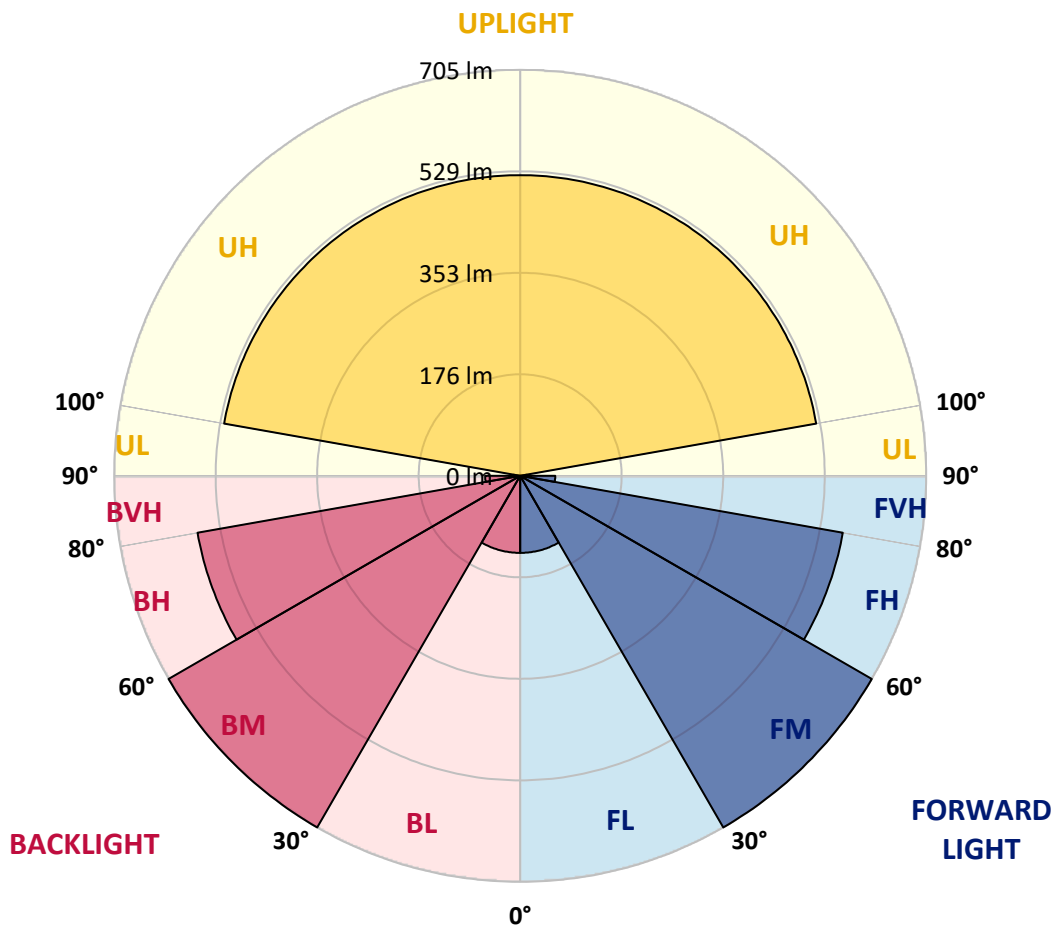
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	133.9	3.9			
FM (30°-60°)	705.2	20.3			
FH (60°-80°)	569.0	16.4			G0/660
FVH (80°-90°)	60.9	1.8			G1/100
BL (0°-30°)	133.9	3.9	B1/500		
BM (30°-60°)	705.2	20.3	B1/1000		
BH (60°-80°)	569.0	16.4	B2/1000		G2/1000
BVH (80°-90°)	60.9	1.8			G1/100
UL (90°-100°)	11.9	0.3		U2/50	
UH (100°-180°)	522.1	15.0		U4/1000	

BUG Rating: B2-U4-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	262.7	262.7	262.7	262.7	262.7	262.7	262.7	262.7	262.7	262.7	262.7
2.5°	262.7	262.7	260.2	260.2	260.2	257.8	257.8	257.8	257.8	255.3	257.8
5°	262.7	262.7	262.7	262.7	260.2	257.8	257.8	257.8	255.3	255.3	255.3
7.5°	260.2	260.2	260.2	260.2	257.8	255.3	255.3	255.3	252.8	252.8	252.8
10°	257.8	260.2	257.8	257.8	255.3	255.3	257.8	257.8	260.2	260.2	260.2
12.5°	255.3	255.3	255.3	257.8	257.8	260.2	265.2	270.2	272.6	275.1	275.1
15°	255.3	255.3	257.8	260.2	265.2	270.2	277.6	285.0	290.0	294.9	294.9
17.5°	255.3	255.3	257.8	265.2	272.6	282.6	294.9	304.9	314.8	322.2	324.7
20°	255.3	255.3	260.2	270.2	285.0	299.9	317.3	332.1	347.0	359.4	359.4
22.5°	257.8	260.2	265.2	277.6	299.9	322.2	344.5	366.8	384.2	399.0	399.0
25°	262.7	262.7	270.2	290.0	317.3	347.0	379.2	406.5	428.8	448.6	448.6
27.5°	265.2	267.7	277.6	302.4	337.1	374.3	418.9	451.1	480.8	498.2	500.7
30°	270.2	272.6	287.5	312.3	354.4	401.5	453.6	498.2	530.4	547.8	552.7
32.5°	272.6	275.1	294.9	324.7	371.8	426.3	485.8	542.8	587.4	607.2	614.7
35°	280.1	282.6	302.4	337.1	391.6	453.6	523.0	589.9	641.9	666.7	671.7
37.5°	287.5	290.0	309.8	349.5	411.4	483.3	562.6	639.5	699.0	728.7	738.6
40°	292.5	294.9	317.3	364.3	433.7	515.5	607.2	691.5	758.4	795.6	803.0
42.5°	299.9	302.4	327.2	376.7	453.6	547.8	654.3	748.5	820.4	862.5	872.4
45°	307.3	309.8	337.1	391.6	475.9	582.5	701.4	815.4	897.2	946.8	956.7
47.5°	314.8	317.3	347.0	406.5	498.2	617.2	751.0	874.9	974.1	1021.2	1041.0
50°	317.3	322.2	352.0	416.4	513.1	646.9	793.1	934.4	1038.5	1100.5	1105.4
52.5°	319.7	324.7	356.9	423.8	525.5	669.2	827.8	984.0	1105.4	1179.8	1174.8
55°	322.2	322.2	356.9	423.8	530.4	684.1	852.6	1016.2	1150.0	1209.5	1244.2
57.5°	312.3	314.8	352.0	418.9	527.9	681.6	852.6	1028.6	1167.4	1231.8	1256.6
60°	299.9	304.9	339.6	406.5	518.0	674.2	847.7	1023.6	1174.8	1244.2	1236.8
62.5°	282.6	292.5	322.2	389.1	503.1	656.8	840.2	1011.2	1157.5	1229.4	1221.9
65°	262.7	272.6	299.9	371.8	470.9	614.7	800.6	986.5	1110.4	1192.2	1177.3
67.5°	242.9	250.3	277.6	342.0	433.7	570.1	748.5	931.9	1043.5	1132.7	1125.3
70°	220.6	223.1	250.3	307.3	396.6	525.5	699.0	855.1	984.0	1050.9	1065.8
72.5°	193.3	193.3	220.6	270.2	352.0	466.0	632.0	768.4	889.8	946.8	969.1
75°	158.6	161.1	183.4	228.0	294.9	399.0	537.8	676.6	778.3	837.7	845.2
77.5°	123.9	126.4	143.8	180.9	237.9	322.2	443.7	552.7	649.4	701.4	686.6
80°	89.2	91.7	104.1	131.4	176.0	240.4	342.0	438.7	508.1	550.2	530.4
82.5°	54.5	57.0	64.4	81.8	111.5	156.1	233.0	304.9	359.4	394.1	386.7
85°	27.3	27.3	32.2	37.2	47.1	69.4	111.5	153.7	195.8	220.6	213.2
87.5°	5.0	7.4	7.4	7.4	7.4	5.0	7.4	7.4	7.4	12.4	5.0
90°	4.6	4.6	5.5	5.5	5.5	5.5	5.5	5.5	5.5	4.6	4.6
92.5°	4.6	4.6	4.6	6.4	7.3	6.4	7.3	5.5	5.5	4.6	4.6
95°	5.5	5.5	6.4	8.2	10.1	11.0	11.0	6.4	6.4	5.5	5.5
97.5°	7.3	8.2	8.2	10.1	16.4	30.2	18.3	9.1	9.1	8.2	7.3
100°	11.9	12.8	12.8	22.8	48.4	64.9	46.6	23.8	17.4	12.8	12.8
102.5°	38.4	40.2	49.3	74.0	109.6	99.6	84.1	79.5	54.8	43.9	42.0
105°	97.8	96.8	104.2	123.3	153.5	150.8	138.9	126.1	108.7	100.5	100.5
107.5°	128.8	128.8	135.2	151.7	174.5	203.7	206.5	163.5	143.4	134.3	133.4
110°	145.3	145.3	150.8	164.5	194.6	235.7	233.9	201.9	177.3	165.4	163.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	148.9	149.8	157.1	178.2	211.1	229.3	221.1	208.3	197.4	188.2	186.4
115°	154.4	154.4	162.6	182.7	201.0	208.3	199.2	189.1	181.8	178.2	180.0
117.5°	152.6	155.3	157.1	168.1	180.0	185.5	180.9	167.2	161.7	159.9	157.1
120°	141.6	141.6	143.4	148.9	155.3	158.1	156.2	147.1	142.5	141.6	139.8
122.5°	126.1	127.0	126.1	128.8	133.4	136.1	134.3	127.0	125.2	125.2	123.3
125°	110.6	110.6	109.6	111.5	114.2	113.3	114.2	110.6	109.6	109.6	108.7
127.5°	99.6	98.7	96.8	97.8	98.7	98.7	99.6	95.9	96.8	97.8	96.8
130°	88.6	88.6	86.8	86.8	86.8	85.0	86.8	85.0	85.9	86.8	87.7
132.5°	78.6	78.6	75.8	74.9	74.9	74.9	75.8	74.9	76.7	78.6	78.6
135°	70.4	70.4	67.6	68.5	68.5	67.6	68.5	67.6	69.4	70.4	70.4
137.5°	64.0	64.0	62.1	62.1	62.1	61.2	62.1	62.1	63.0	64.9	65.8
140°	58.5	58.5	57.6	57.6	56.6	57.6	57.6	57.6	58.5	59.4	59.4
142.5°	55.7	54.8	53.9	53.0	53.9	53.9	53.9	53.0	53.9	55.7	55.7
145°	51.2	51.2	50.3	50.3	50.3	51.2	50.3	50.3	51.2	51.2	52.1
147.5°	48.4	48.4	47.5	48.4	48.4	48.4	48.4	47.5	48.4	48.4	49.3
150°	47.5	46.6	45.7	46.6	46.6	45.7	45.7	45.7	45.7	46.6	46.6
152.5°	44.8	44.8	43.9	44.8	43.9	43.9	43.9	43.9	43.9	44.8	45.7
155°	42.9	42.9	42.0	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9
157.5°	41.1	42.0	41.1	41.1	41.1	41.1	41.1	41.1	41.1	42.0	42.0
160°	40.2	40.2	40.2	40.2	39.3	39.3	39.3	40.2	40.2	40.2	41.1
162.5°	39.3	39.3	39.3	39.3	38.4	38.4	38.4	38.4	39.3	39.3	40.2
165°	39.3	38.4	38.4	38.4	37.5	37.5	37.5	37.5	38.4	39.3	38.4
167.5°	37.5	37.5	37.5	37.5	37.5	36.5	36.5	37.5	37.5	37.5	38.4
170°	37.5	37.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	37.5
172.5°	37.5	37.5	37.5	37.5	36.5	36.5	36.5	36.5	36.5	37.5	37.5
175°	37.5	37.5	37.5	37.5	36.5	36.5	36.5	37.5	37.5	37.5	36.5
177.5°	37.5	37.5	37.5	37.5	36.5	37.5	37.5	37.5	37.5	37.5	37.5
180°	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5

(END OF REPORT)