

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: P832970

Luminaire Tested: **TTN-D0-830-U-RW-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P832970
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-D0-830-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: 1596.8 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B1 - U4 - G1

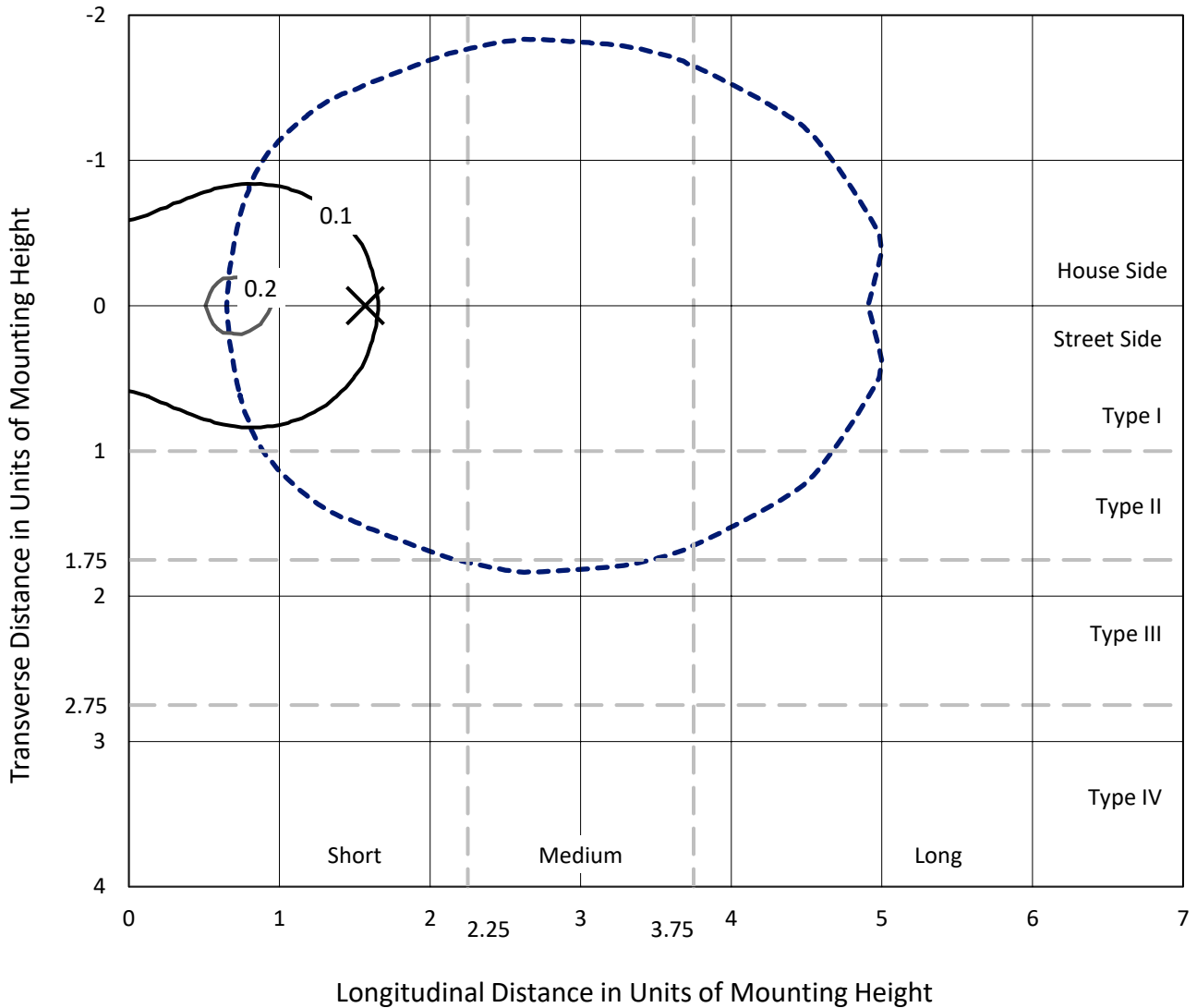
Input Watts (W): 15.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

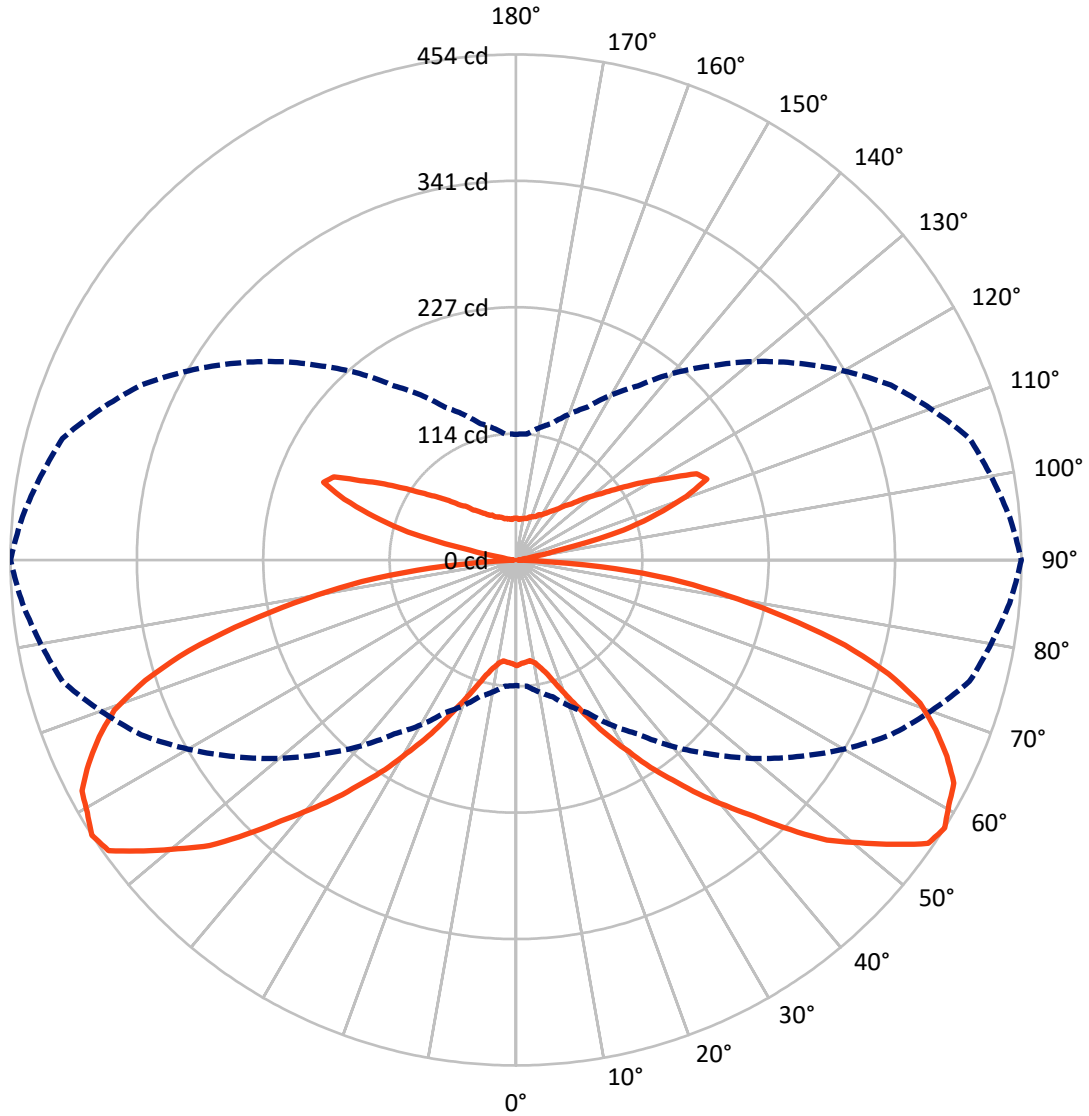
× Max cd
 - - - 1/2 Max cd



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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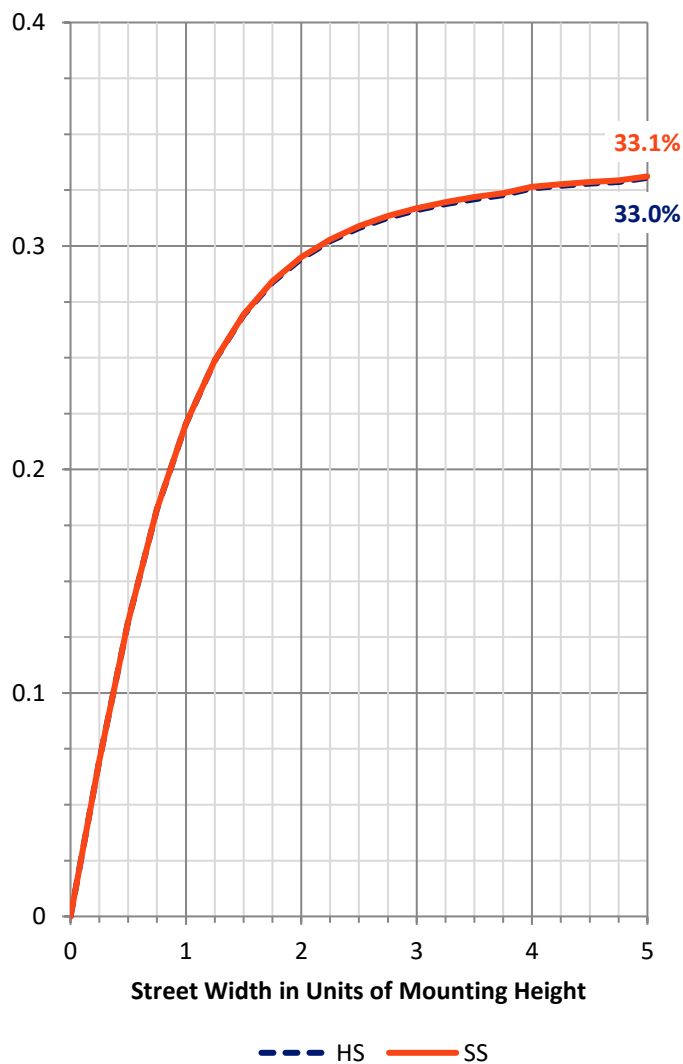
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	531.4	267.0	798.4
	% Fixture	33.3	16.7	50.0
Street Side	Lumens	531.4	267.0	798.4
	% Fixture	33.3	16.7	50.0
Total	Lumens	1062.7	534.0	1596.8
	% Fixture	66.6	33.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.9	0.6
10°-20°	28.5	1.8
20°-30°	59.4	3.7
30°-40°	106.6	6.7
40°-50°	170.3	10.7
50°-60°	233.1	14.6
60°-70°	240.5	15.1
70°-80°	171.0	10.7
80°-90°	44.5	2.8
90°-100°	11.9	0.7
100°-110°	121.1	7.6
110°-120°	177.1	11.1
120°-130°	102.8	6.4
130°-140°	54.4	3.4
140°-150°	32.3	2.0
150°-160°	19.9	1.2
160°-170°	10.9	0.7
170°-180°	3.5	0.2
0°-90°	1062.7	66.6
0°-180°	1596.8	100.0

Coefficient of Utilization



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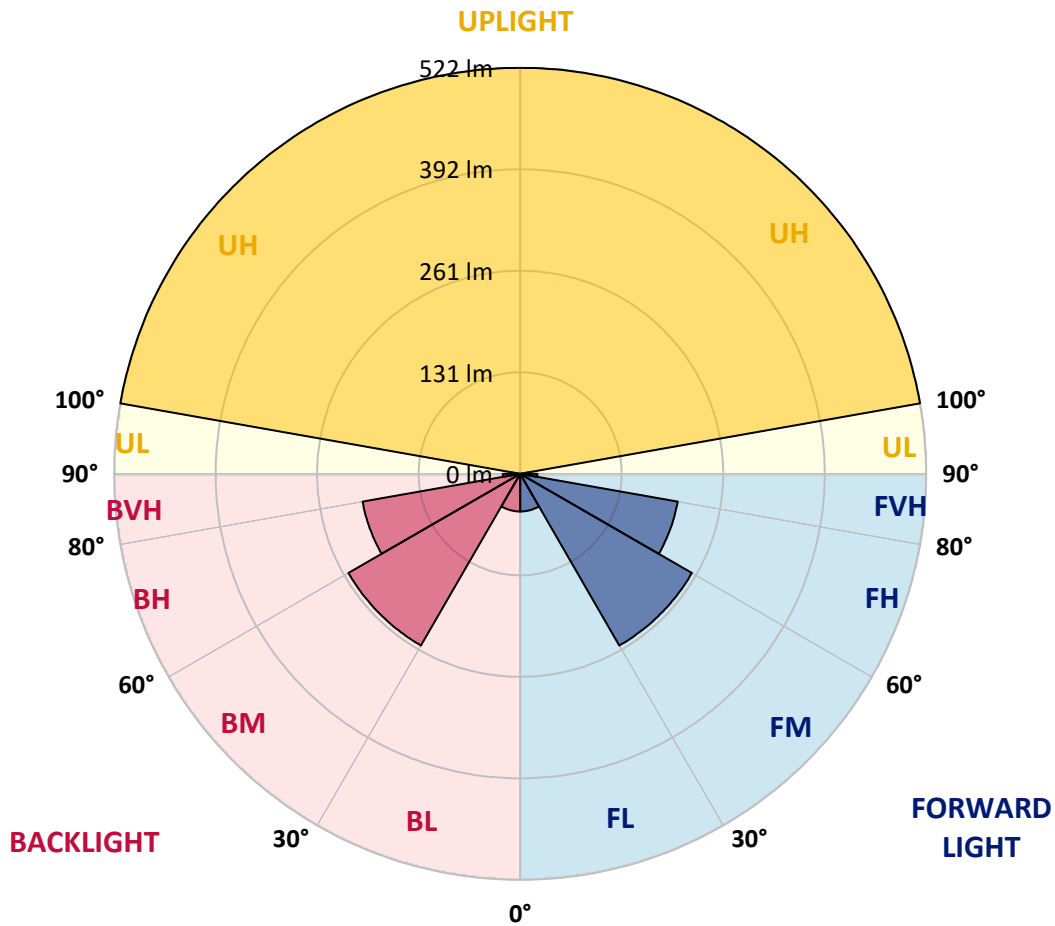
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	48.4	3.0			
FM (30°-60°)	255.0	16.0			
FH (60°-80°)	205.7	12.9			G0/660
FVH (80°-90°)	22.2	1.4			G1/100
BL (0°-30°)	48.4	3.0	B0/110		
BM (30°-60°)	255.0	16.0	B1/1000		
BH (60°-80°)	205.7	12.9	B1/500		G1/500
BVH (80°-90°)	22.2	1.4			G1/100
UL (90°-100°)	11.9	0.7		U2/50	
UH (100°-180°)	522.1	32.7		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°	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0
2.5°	95.0	95.0	94.1	94.1	94.1	93.2	93.2	93.2	93.2	92.3	93.2
5°	95.0	95.0	95.0	95.0	94.1	93.2	93.2	93.2	92.3	92.3	92.3
7.5°	94.1	94.1	94.1	94.1	93.2	92.3	92.3	92.3	91.4	91.4	91.4
10°	93.2	94.1	93.2	93.2	92.3	92.3	93.2	93.2	94.1	94.1	94.1
12.5°	92.3	92.3	92.3	93.2	93.2	94.1	95.9	97.7	98.6	99.5	99.5
15°	92.3	92.3	93.2	94.1	95.9	97.7	100.4	103.1	104.9	106.7	106.7
17.5°	92.3	92.3	93.2	95.9	98.6	102.2	106.7	110.2	113.8	116.5	117.4
20°	92.3	92.3	94.1	97.7	103.1	108.4	114.7	120.1	125.5	130.0	130.0
22.5°	93.2	94.1	95.9	100.4	108.4	116.5	124.6	132.6	138.9	144.3	144.3
25°	95.0	95.0	97.7	104.9	114.7	125.5	137.1	147.0	155.0	162.2	162.2
27.5°	95.9	96.8	100.4	109.3	121.9	135.3	151.5	163.1	173.9	180.1	181.0
30°	97.7	98.6	104.0	112.9	128.2	145.2	164.0	180.1	191.8	198.1	199.9
32.5°	98.6	99.5	106.7	117.4	134.4	154.2	175.7	196.3	212.4	219.6	222.3
35°	101.3	102.2	109.3	121.9	141.6	164.0	189.1	213.3	232.1	241.1	242.9
37.5°	104.0	104.9	112.0	126.4	148.8	174.8	203.4	231.2	252.7	263.5	267.1
40°	105.8	106.7	114.7	131.7	156.8	186.4	219.6	250.0	274.2	287.7	290.4
42.5°	108.4	109.3	118.3	136.2	164.0	198.1	236.6	270.7	296.7	311.9	315.5
45°	111.1	112.0	121.9	141.6	172.1	210.6	253.6	294.9	324.4	342.4	345.9
47.5°	113.8	114.7	125.5	147.0	180.1	223.2	271.6	316.4	352.2	369.2	376.4
50°	114.7	116.5	127.3	150.6	185.5	233.9	286.8	337.9	375.5	397.9	399.7
52.5°	115.6	117.4	129.1	153.3	190.0	242.0	299.3	355.8	399.7	426.6	424.8
55°	116.5	116.5	129.1	153.3	191.8	247.4	308.3	367.5	415.8	437.4	449.9
57.5°	112.9	113.8	127.3	151.5	190.9	246.5	308.3	371.9	422.1	445.4	454.4
60°	108.4	110.2	122.8	147.0	187.3	243.8	306.5	370.1	424.8	449.9	447.2
62.5°	102.2	105.8	116.5	140.7	181.9	237.5	303.8	365.7	418.5	444.5	441.8
65°	95.0	98.6	108.4	134.4	170.3	222.3	289.5	356.7	401.5	431.1	425.7
67.5°	87.8	90.5	100.4	123.7	156.8	206.1	270.7	337.0	377.3	409.6	406.9
70°	79.8	80.7	90.5	111.1	143.4	190.0	252.7	309.2	355.8	380.0	385.4
72.5°	69.9	69.9	79.8	97.7	127.3	168.5	228.5	277.8	321.7	342.4	350.4
75°	57.4	58.3	66.3	82.5	106.7	144.3	194.5	244.7	281.4	302.9	305.6
77.5°	44.8	45.7	52.0	65.4	86.0	116.5	160.4	199.9	234.8	253.6	248.3
80°	32.3	33.2	37.6	47.5	63.6	86.9	123.7	158.6	183.7	199.0	191.8
82.5°	19.7	20.6	23.3	29.6	40.3	56.5	84.2	110.2	130.0	142.5	139.8
85°	9.9	9.9	11.7	13.4	17.0	25.1	40.3	55.6	70.8	79.8	77.1
87.5°	1.8	2.7	2.7	2.7	2.7	1.8	2.7	2.7	2.7	4.5	1.8
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)