

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: P833336

Luminaire Tested: **TTN-D1-830-U-WQ-SG-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833336
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-WQ-SG-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND WIDE DISTRIBUTION WITH SOLITE GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3337.8 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B1 - U4 - G1

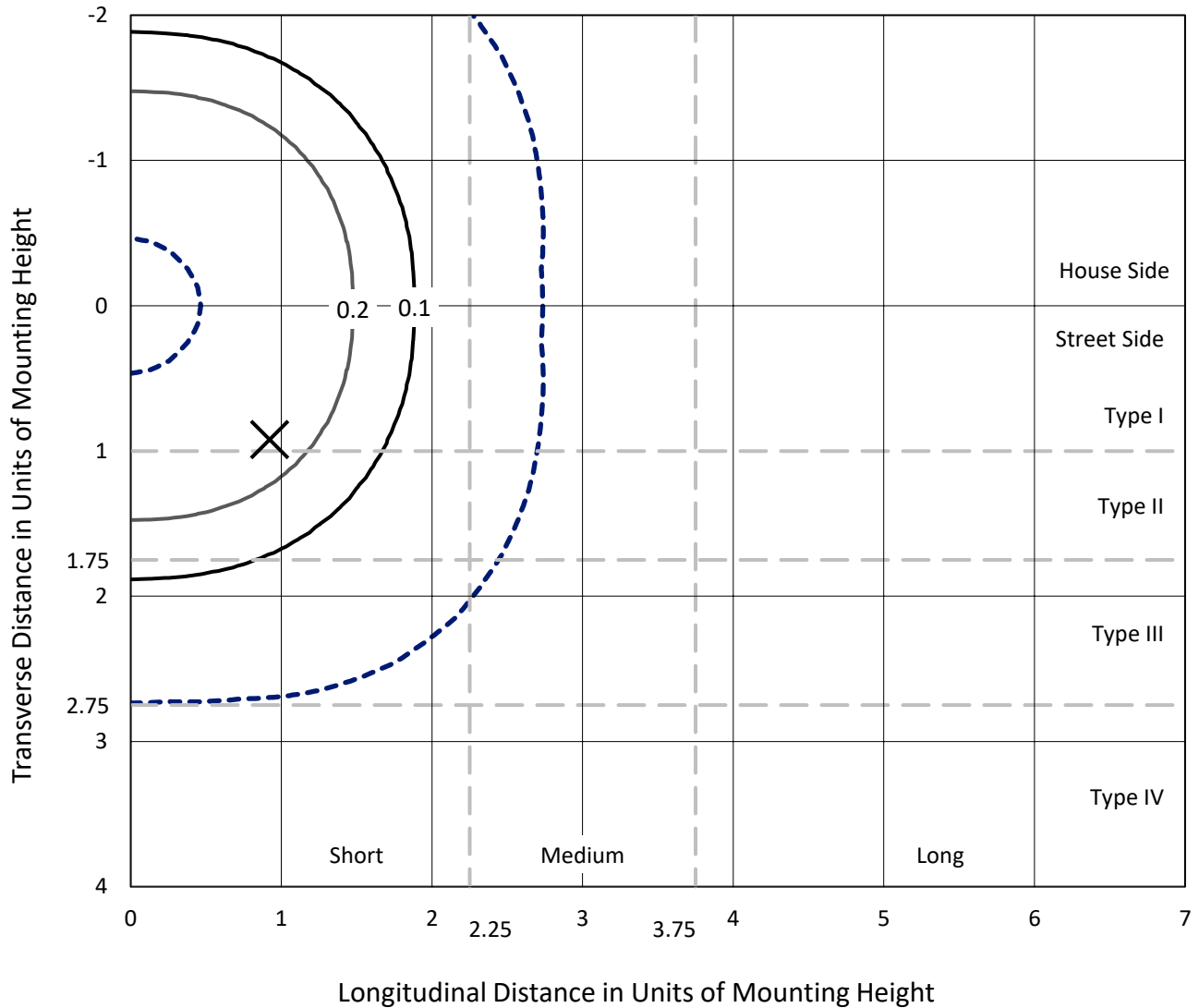
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

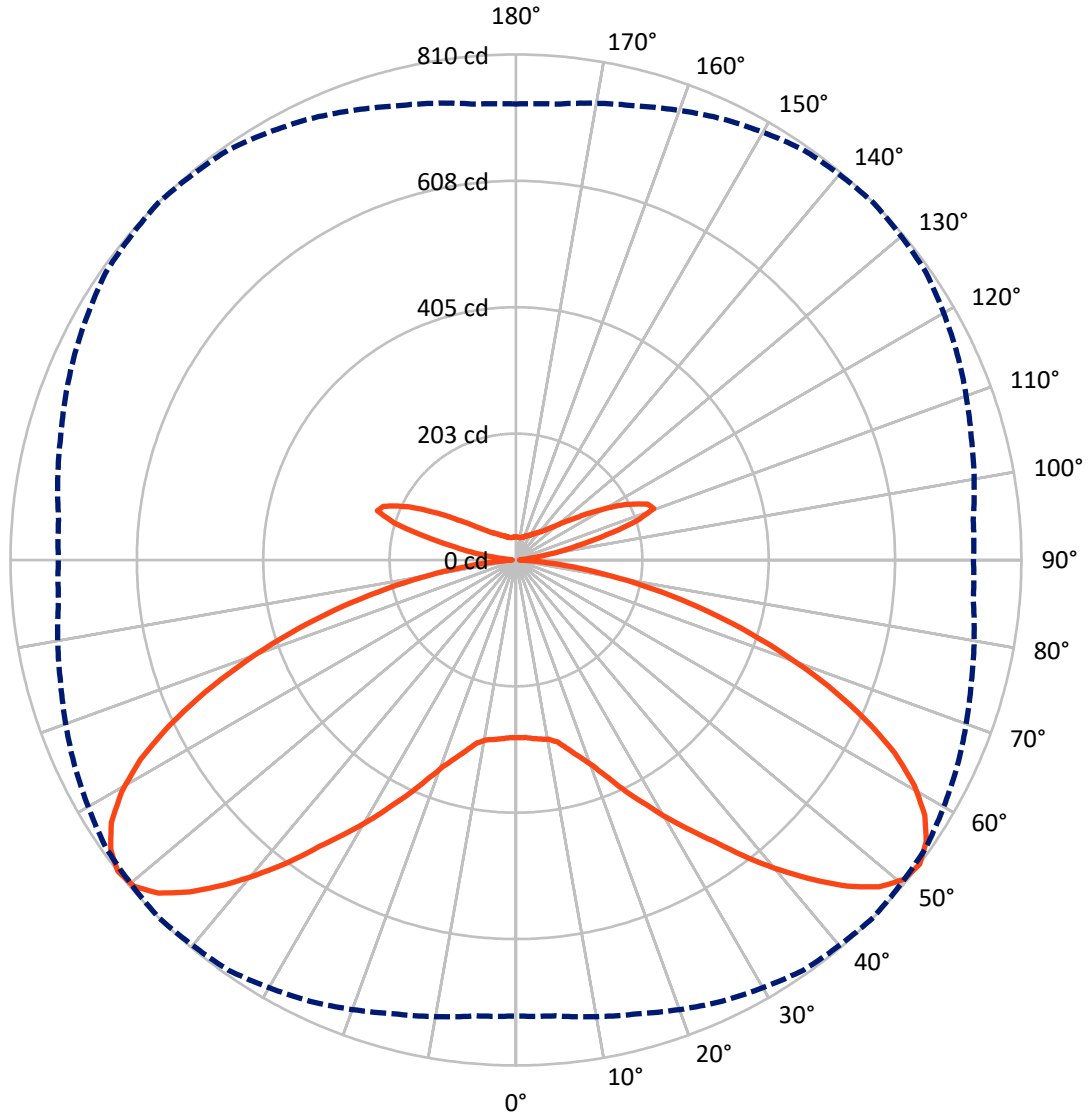
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.5 fc
 Type V - Short - N/A

REPORT NUMBER: P833336
CATALOG NUMBER: TTN-D1-830-U-WQ-SG-UPL2

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 52.5-Deg Vertical

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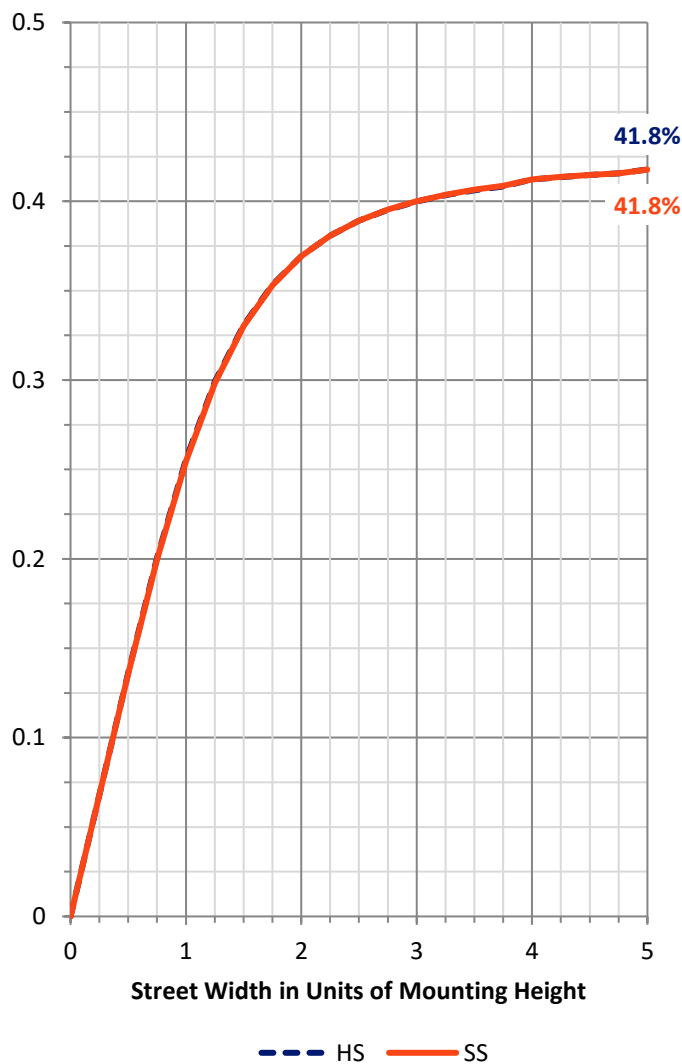
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1401.9	267.0	1668.9
	% Fixture	42.0	8.0	50.0
Street Side	Lumens	1401.9	267.0	1668.9
	% Fixture	42.0	8.0	50.0
Total	Lumens	2803.7	534.0	3337.8
	% Fixture	84.0	16.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.5	0.8
10°-20°	90.5	2.7
20°-30°	190.9	5.7
30°-40°	348.7	10.4
40°-50°	555.2	16.6
50°-60°	671.3	20.1
60°-70°	564.4	16.9
70°-80°	299.2	9.0
80°-90°	56.1	1.7
90°-100°	11.9	0.4
100°-110°	121.1	3.6
110°-120°	177.1	5.3
120°-130°	102.8	3.1
130°-140°	54.4	1.6
140°-150°	32.3	1.0
150°-160°	19.9	0.6
160°-170°	10.9	0.3
170°-180°	3.5	0.1
0°-90°	2803.7	84.0
0°-180°	3337.8	100.0

Coefficient of Utilization

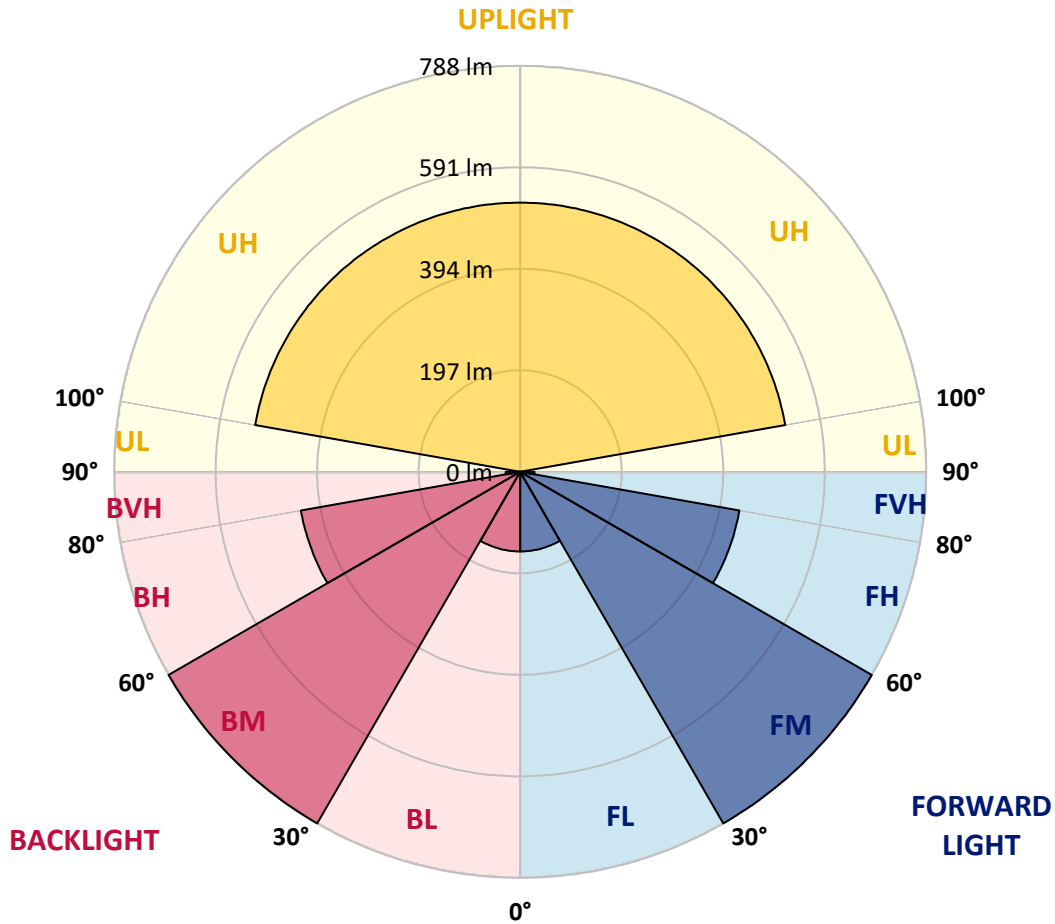


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	154.4	4.6			
FM (30°-60°)	787.6	23.6			
FH (60°-80°)	431.8	12.9			G0/660
FVH (80°-90°)	28.0	0.8			G1/100
BL (0°-30°)	154.4	4.6	B1/500		
BM (30°-60°)	787.6	23.6	B1/1000		
BH (60°-80°)	431.8	12.9	B1/500		G0/660
BVH (80°-90°)	28.0	0.8			G1/100
UL (90°-100°)	11.9	0.4		U2/50	
UH (100°-180°)	522.1	15.6		U4/1000	

BUG Rating: B1-U4-G1
 Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0
2.5°	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0	285.0
5°	287.5	287.5	285.0	287.5	287.5	287.5	287.5	287.5	287.5	287.5	287.5
7.5°	287.5	287.5	287.5	289.9	289.9	289.9	289.9	287.5	287.5	287.5	287.5
10°	292.4	292.4	292.4	292.4	292.4	292.4	292.4	292.4	292.4	292.4	292.4
12.5°	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8	299.8
15°	312.2	312.2	312.2	312.2	314.7	314.7	314.7	312.2	312.2	312.2	312.2
17.5°	327.1	327.1	329.6	329.6	332.1	332.1	332.1	329.6	327.1	329.6	327.1
20°	349.4	349.4	349.4	351.9	354.4	354.4	354.4	349.4	349.4	349.4	349.4
22.5°	374.2	374.2	374.2	376.7	379.1	379.1	379.1	374.2	374.2	374.2	374.2
25°	403.9	403.9	403.9	406.4	408.9	411.4	411.4	406.4	403.9	403.9	401.4
27.5°	433.7	433.7	438.6	441.1	443.6	443.6	443.6	438.6	436.1	436.1	436.1
30°	468.3	468.3	473.3	475.8	480.7	480.7	480.7	473.3	470.8	468.3	468.3
32.5°	500.6	503.0	508.0	513.0	517.9	517.9	520.4	510.5	505.5	503.0	503.0
35°	535.3	537.7	542.7	550.1	555.1	557.6	560.0	550.1	542.7	540.2	540.2
37.5°	574.9	577.4	584.8	592.2	602.2	607.1	609.6	594.7	582.3	577.4	577.4
40°	619.5	622.0	629.4	639.3	649.2	654.2	656.7	641.8	629.4	624.5	622.0
42.5°	656.7	661.6	669.1	683.9	693.8	701.3	701.3	683.9	669.1	661.6	661.6
45°	691.4	696.3	708.7	723.6	738.5	745.9	743.4	726.1	708.7	698.8	696.3
47.5°	718.6	723.6	738.5	755.8	775.6	783.1	780.6	760.8	738.5	726.1	723.6
50°	733.5	736.0	753.3	778.1	797.9	805.4	800.4	780.6	755.8	738.5	736.0
52.5°	731.0	733.5	753.3	780.6	802.9	810.3	802.9	780.6	755.8	736.0	733.5
55°	716.2	718.6	738.5	768.2	790.5	797.9	790.5	768.2	740.9	721.1	718.6
57.5°	688.9	691.4	711.2	740.9	765.7	773.1	763.2	738.5	711.2	691.4	691.4
60°	649.2	651.7	671.5	703.8	726.1	733.5	721.1	701.3	674.0	651.7	649.2
62.5°	597.2	597.2	619.5	651.7	671.5	681.5	669.1	646.8	622.0	597.2	599.7
65°	535.3	532.8	555.1	584.8	607.1	614.6	602.2	582.3	557.6	535.3	535.3
67.5°	470.8	470.8	488.2	513.0	532.8	540.2	527.8	510.5	490.7	470.8	470.8
70°	401.4	401.4	413.8	438.6	456.0	460.9	453.5	436.1	418.8	401.4	401.4
72.5°	332.1	329.6	342.0	361.8	376.7	381.6	374.2	364.3	344.4	332.1	332.1
75°	262.7	260.2	267.6	285.0	297.4	302.3	294.9	287.5	272.6	262.7	262.7
77.5°	195.8	193.3	200.7	215.6	223.0	225.5	220.5	215.6	203.2	195.8	195.8
80°	133.8	131.3	136.3	146.2	153.6	153.6	151.2	148.7	138.8	133.8	136.3
82.5°	79.3	76.8	81.8	89.2	94.2	91.7	91.7	89.2	81.8	79.3	79.3
85°	34.7	32.2	34.7	39.6	44.6	42.1	42.1	42.1	37.2	34.7	34.7
87.5°	5.0	5.0	5.0	7.4	9.9	7.4	7.4	7.4	5.0	5.0	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)