

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: P833327

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

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P833327
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-CG-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3000K, 80 CRI LEDS AND RECTANGULAR DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3288.8 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B2 - U4 - G2

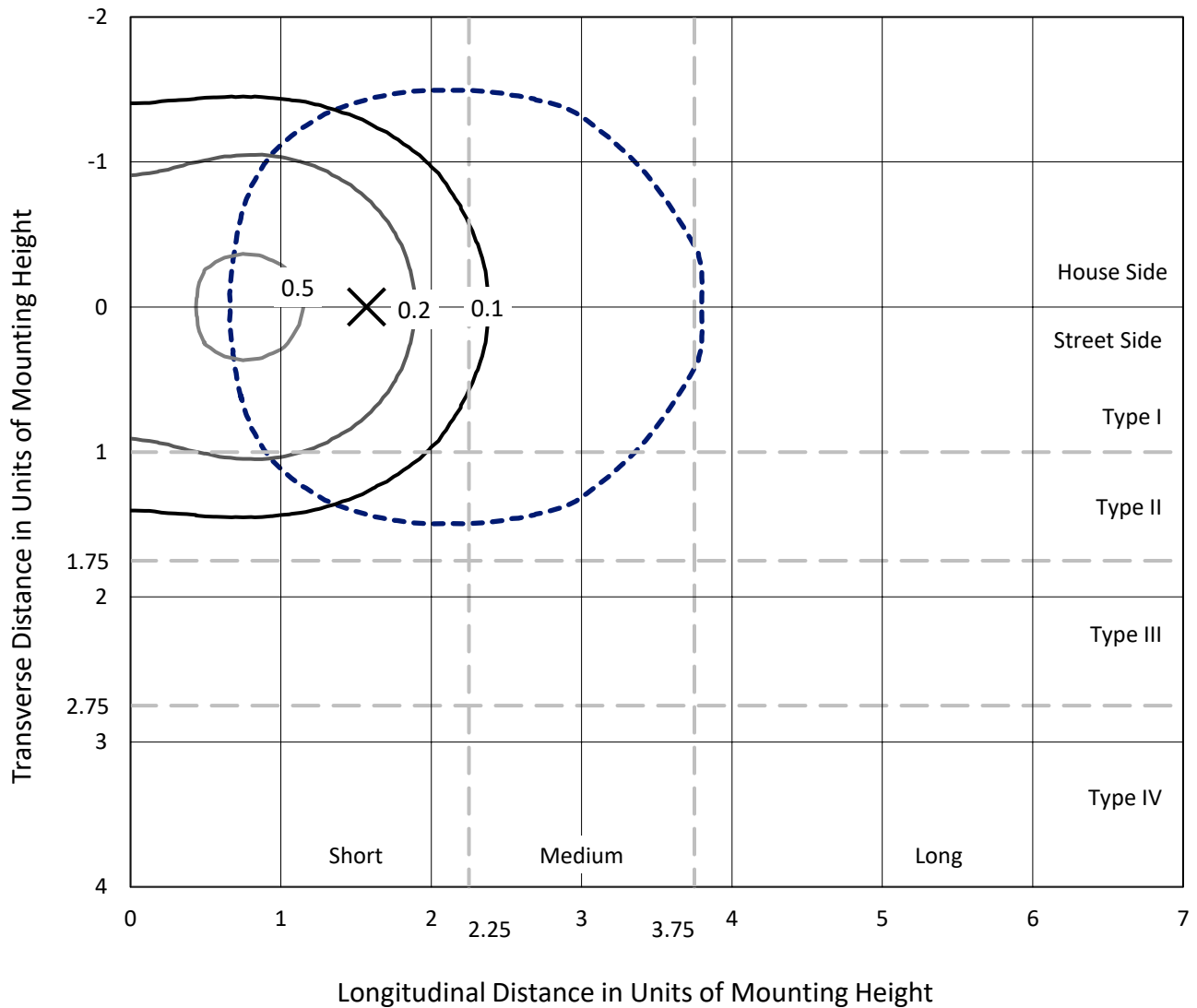
Input Watts (W): 30.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P833327
 CATALOG NUMBER: TTN-D1-830-U-RW-CG-UPL2

Iso-Footcandle Lines of Horizontal Illumination

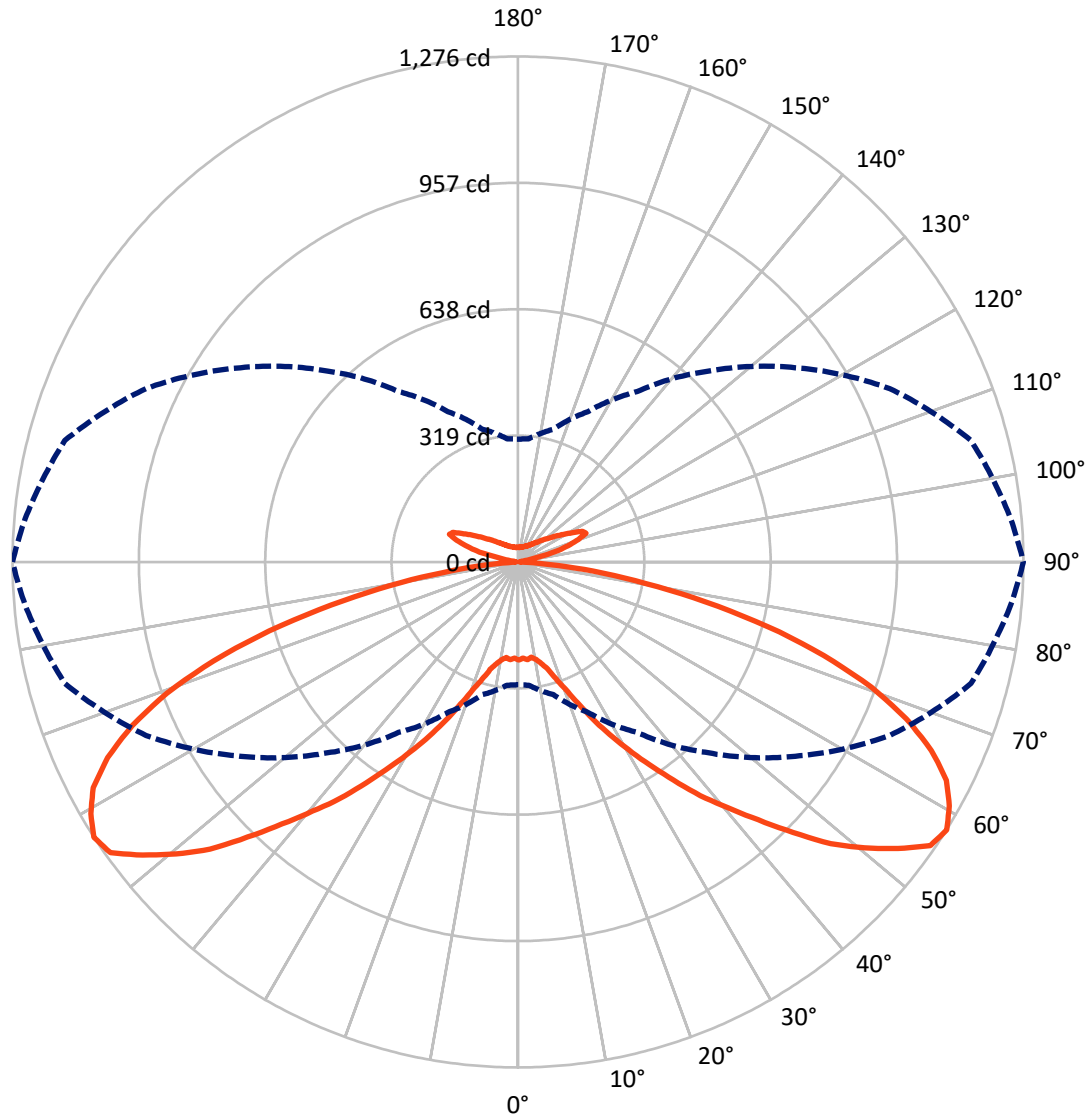
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.6 fc
 Type II - Short - N/A

REPORT NUMBER: P833327
CATALOG NUMBER: TTN-D1-830-U-RW-CG-UPL2

Luminous Intensity Polar Plot



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

REPORT NUMBER: P833327

CATALOG NUMBER: TTN-D1-830-U-RW-CG-UPL2

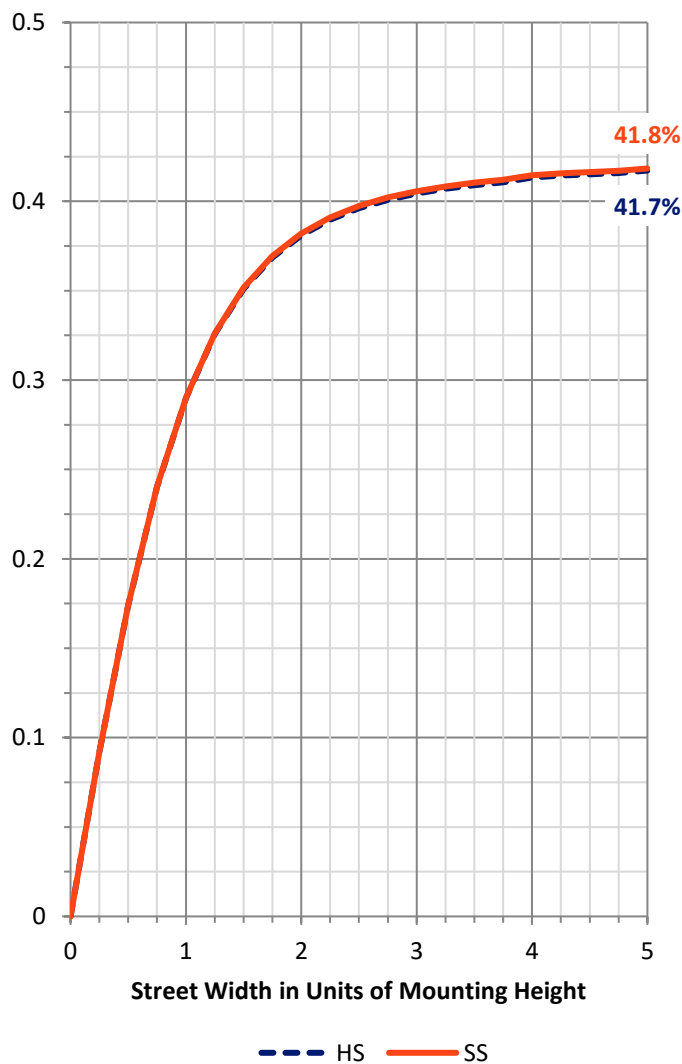
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1377.4	267.0	1644.4
	% Fixture	41.9	8.1	50.0
Street Side	Lumens	1377.4	267.0	1644.4
	% Fixture	41.9	8.1	50.0
Total	Lumens	2754.7	534.0	3288.8
	% Fixture	83.8	16.2	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.6	0.7
10°-20°	76.1	2.3
20°-30°	162.0	4.9
30°-40°	298.5	9.1
40°-50°	480.6	14.6
50°-60°	650.5	19.8
60°-70°	632.5	19.2
70°-80°	368.0	11.2
80°-90°	62.9	1.9
90°-100°	11.9	0.4
100°-110°	121.1	3.7
110°-120°	177.1	5.4
120°-130°	102.8	3.1
130°-140°	54.4	1.7
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°	2754.7	83.8
0°-180°	3288.8	100.0

Coefficient of Utilization



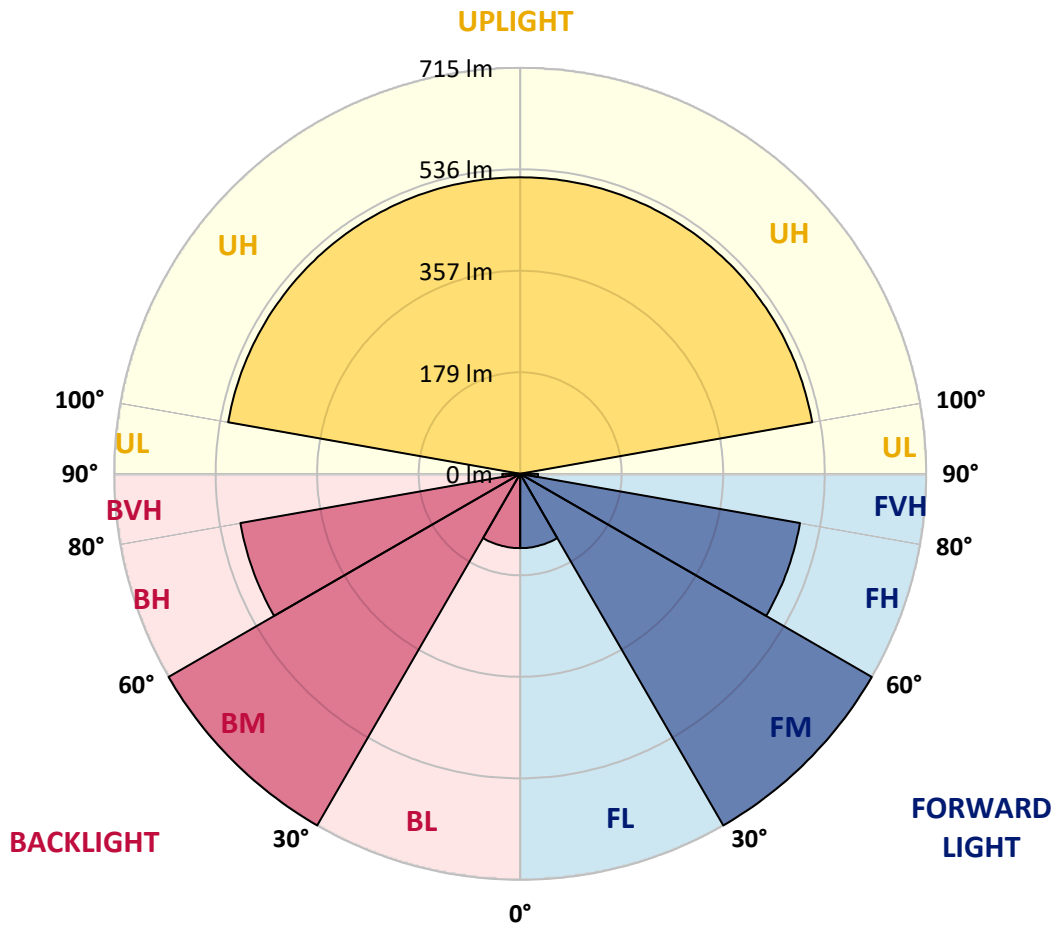
REPORT NUMBER: P833327
 CATALOG NUMBER: TTN-D1-830-U-RW-CG-UPL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	130.8	4.0			
FM (30°-60°)	714.8	21.7			
FH (60°-80°)	500.2	15.2			G0/660
FVH (80°-90°)	31.5	1.0			G1/100
BL (0°-30°)	130.8	4.0	B1/500		
BM (30°-60°)	714.8	21.7	B1/1000		
BH (60°-80°)	500.2	15.2	B2/1000		G2/1000
BVH (80°-90°)	31.5	1.0			G1/100
UL (90°-100°)	11.9	0.4		U2/50	
UH (100°-180°)	522.1	15.9		U4/1000	

BUG Rating: B2-U4-G2

Type II Short





REPORT NUMBER: P833327

CATALOG NUMBER: TTN-D1-830-U-RW-CG-UPL2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	247.8	247.8	247.8	247.8	247.8	247.8	247.8	247.8	247.8	247.8	247.8
2.5°	247.8	247.8	247.8	247.8	245.3	245.3	245.3	242.8	242.8	242.8	242.8
5°	247.8	247.8	247.8	250.3	250.3	250.3	247.8	247.8	247.8	247.8	247.8
7.5°	247.8	250.3	250.3	247.8	247.8	245.3	245.3	245.3	242.8	242.8	242.8
10°	247.8	247.8	247.8	247.8	245.3	245.3	247.8	247.8	250.3	250.3	250.3
12.5°	245.3	245.3	247.8	247.8	247.8	250.3	255.2	257.7	260.2	262.7	262.7
15°	247.8	247.8	250.3	252.7	255.2	260.2	267.6	275.0	280.0	282.5	280.0
17.5°	247.8	250.3	252.7	257.7	265.1	272.6	285.0	294.9	304.8	307.3	309.7
20°	252.7	252.7	255.2	265.1	277.5	289.9	307.3	324.6	337.0	341.9	341.9
22.5°	255.2	257.7	260.2	272.6	292.4	312.2	337.0	356.8	374.2	384.1	386.6
25°	262.7	262.7	267.6	285.0	309.7	339.5	371.7	401.4	423.7	436.1	438.6
27.5°	267.6	270.1	277.5	299.8	332.0	369.2	413.8	448.5	475.8	490.6	493.1
30°	272.6	275.0	289.9	314.7	354.3	398.9	451.0	495.6	530.3	547.6	550.1
32.5°	280.0	282.5	299.8	327.1	374.2	428.7	488.1	542.7	592.2	607.1	609.6
35°	287.4	289.9	309.7	341.9	396.5	458.4	527.8	592.2	651.7	671.5	676.5
37.5°	294.9	297.3	317.2	356.8	418.8	490.6	572.4	649.2	713.6	740.9	748.3
40°	302.3	304.8	327.1	371.7	441.1	525.3	619.5	703.7	778.1	810.3	815.2
42.5°	307.3	309.7	334.5	384.1	463.4	557.5	669.0	763.2	842.5	884.6	889.6
45°	314.7	317.2	344.4	401.4	483.2	594.7	716.1	830.1	921.8	968.9	973.8
47.5°	319.6	322.1	351.9	411.3	505.5	629.4	765.7	889.6	998.6	1048.1	1063.0
50°	322.1	324.6	356.8	421.2	520.4	654.2	805.3	949.0	1065.5	1127.4	1134.9
52.5°	322.1	327.1	359.3	428.7	530.3	676.5	837.5	998.6	1129.9	1199.3	1201.8
55°	319.6	322.1	356.8	426.2	535.2	686.4	859.8	1028.3	1174.5	1241.4	1263.7
57.5°	309.7	312.2	346.9	418.8	525.3	681.4	854.9	1035.8	1184.4	1248.9	1276.1
60°	294.9	299.8	332.0	401.4	510.4	664.1	840.0	1020.9	1169.6	1248.9	1251.3
62.5°	277.5	280.0	312.2	379.1	488.1	636.8	812.7	991.2	1134.9	1216.6	1214.2
65°	252.7	255.2	282.5	351.9	448.5	584.8	758.2	944.1	1068.0	1154.7	1147.3
67.5°	225.5	228.0	252.7	314.7	401.4	527.8	683.9	864.8	973.8	1063.0	1058.1
70°	195.8	195.8	218.1	270.1	351.9	463.4	602.1	760.7	869.7	944.1	946.6
72.5°	161.1	161.1	180.9	225.5	294.9	389.0	508.0	649.2	738.4	802.8	807.8
75°	126.4	123.9	141.2	178.4	232.9	309.7	401.4	522.8	592.2	654.2	651.7
77.5°	89.2	89.2	99.1	128.9	168.5	230.4	297.3	394.0	441.1	493.1	483.2
80°	57.0	57.0	61.9	84.2	111.5	153.6	195.8	267.6	299.8	339.5	327.1
82.5°	29.7	27.3	32.2	44.6	59.5	84.2	109.0	156.1	171.0	200.7	190.8
85°	9.9	9.9	9.9	14.9	22.3	32.2	42.1	66.9	69.4	89.2	81.8
87.5°	2.5	0.0	0.0	2.5	2.5	2.5	2.5	7.4	7.4	14.9	9.9
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



REPORT NUMBER: P833327
 CATALOG NUMBER: TTN-D1-830-U-RW-CG-UPL2

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)